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METALS

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In This Issue

MINERALS — REVIEW AND OUTLOOK
By U. S. BUREAU OF MINES
DEPARTMENT OF INTERIOR

FREE WORLD STAKE IN ALUMINUM
By NATHANIEL V. DAVIS, President
Aluminium Limited

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DOMESTIC METAL MARKET REVIEW

WASHINGTON REPORT

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Two LINE *Editorials*

What we have come to these days is indicated by the fact that it is considered a piddling economy when the President suggests a budget of $77,000,000,000 instead of $80,000,000,000.

* * *

A sociologist says that nowadays you don't find so many boys tied to their mothers' apron strings. One reason for this is that nowadays you don't find many mothers wearing aprons.

* * *

We have lots of things to worry about, but not included among them is the fear that we'll live long enough to see some enemy shooting bombs at us from another planet.

* * *

When the scientists say that "Space is unlimited", it should be distinctly understood that they are not referring to parking space.

* * *

If, as the economist says, our prosperity depends on maintaining high taxes. Why don't we increase the tax rate to 100% and insure perfect prosperity?

* * *

Wonder if all the department store Santa Clauses will be drawing unemployment compensation from now until next December?

Washington Report

January 20, 1959

THE ADMINISTRATION apparently does not intend to offer a broad mineral aid program at the current session of Congress. This was indicated during the month by Interior Secretary Fred Seaton who said he planned to continue import quotas as the chief Government prop for the domestic lead and zinc industry.

The quotas were put into effect last year after Congress rejected an Administration program to support the prices of domestic lead and zinc and other metals.

The quota program, which has been in effect only a short while, has already firmed up prices of both lead and zinc, Mr. Seaton declared. He said he had every reason to believe the program would continue to strengthen prices of the two metals. "My inclination is to rest with the quota program," he added.

At the same time, Mr. Seaton said he had received "no complaints" that lead importers were circumventing their quotas by finishing products abroad and bringing them into this country outside of the program.

Mr. Seaton also said that the Department of Interior "will continue to encourage" the barter program under which this country exchanges surplus farm products for strategic materials from abroad. He noted, however, that the working of the program is under the jurisdiction of the Agriculture Department.

Murray Plans Probe

Commenting on Mr. Seaton's remarks, Senator James E. Murray (Dem., Mont.), chairman of the Senate Interior Committee, forecast that his group would study the effects of the lead and zinc import quotas on prices of both metals.

Senator Murray said he was "amazed that the Administration, after four years of promising a long-range minerals program, now says frankly it has nothing to offer The mining industry has no confidence whatever in this Administration."

The Senator predicted that a subsidy bill will be offered for such minerals as chrome, acid-grade fluospar, tungsten, antimony and cobalt. Mr. Seaton did not rule out the possibility the Administration would come up with some proposals for minerals other than lead and zinc.

Several other mining state Congressmen reacted cautiously to the Secretary's statements. Democratic Sens. Church of Idaho and Carroll of Colorado indicated they would wait and see how mineral prices fare in the next few months before deciding on any action.

Rep. Pfost (D., Idaho), a member of the House Interior Committee, said she hoped the price rise stemming from the quota program will continue, but that if it does not, "we don't dare adjourn Congress unless we have some assurance prices will be kept up." The lawmaker added there has been no move so far by Westerners to get together on a mineral subsidy this session.

One influential Western Senator, also a Democrat, predicted flatly that Congress would pass no mineral subsidy bill this session, regardless of what position the Administration takes.

Optimism Voiced on Outlook

The Department of Commerce believes that 1959 will be a better year than 1958 for most of the metal industries. Discussing the outlook for copper, lead, zinc, aluminum and magnesium, the agency's Business and Defense Services Administration said:

Copper: With many important copper-consuming industries predicting an improved volume of business, the increased demand for copper and its products which appeared in the last part of 1958 is expected to carry through the coming year. Supply and demand are due to come into better balance and greater price-stability consequently is in prospect. The copper and copper-base products supply situation is rated the best in years, due to expansion of mining capacity and mill facilities. In the past year, every segment of the industry showed a decline from 1957.

Lead and Zinc: Strengthened demand for lead and zinc is the 1959 forecast. For lead, the outlook is for consumption about 5 per cent over the 1958 estimate of 1,000,000 short tons — a figure 12 per cent below 1957. Zinc usage is expected to be 8 to 10 per cent over estimated 1958 consumption of 865,000 short tons—a falling off of 7.6 per cent from 1957.

Aluminum and Magnesium: Producers anticipate aluminum shipments in 1959 will be 20 per cent or more above 1958 because of increased usage in normal channels of consumption, plus the growing demand for the metal in new products. Primary production approximating 1,600,000 tons in 1958 runs about 6 per cent below 1957, and shipments of mill products and ingots to consuming industries lag in about the same proportion. Recently announced stabilized prices will aid the industry.

The magnesium outlook also is good, with the upward trend in shipments of magnesium ingot, castings and wrought products continuing. The growth may approximate 20 per cent. Aircraft and missile programs stimulate demand.

Output Value Off In 1958

The annual Bureau of Mines preliminary production report showing the value of domestic production in all major mineral groupings in 1958 was released by the Department of the Interior. The report shows total mineral output in 1958 is valued at $16,350,000,000 on a preliminary basis compared with $18,126,000,000 in 1957. Output of metals is valued at $1,580,000,000 in 1958 against $2,129,000,000 in 1957.

Aluminum Renegotiation

Aluminum figured in the metal news from Washington. A Senate-House "watchdog" committee reported that renegotiation of contracts covering the purchase of surplus aluminum saved the Government $96,710,960 by forcing three aluminum companies to account for imports.

Sen. A. Willis Robertson, chairman of the joint "watchdog" committee on defense production, said the figure was reported to him by the government's General Services Administration.

Eight years ago the government began signing contracts to buy surplus aluminum as an expansion incentive to the industry. The contracts provided that the Government would purchase surplus aluminum from

(Continued on Page 9)

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Minerals

Review of '58 and Outlook for '59

By U. S. Bureau of Mines, Department of Interior

METALS LOST ground in 1958. Lower average prices were a factor in the over-all decrease in value, although there were reductions in the volume of output of several important commodities. Among the metals, copper output declined approximately 10 per cent, lead and zinc were off 23 per cent, iron ore was down 36 per cent, and gold and silver production reached the lowest level since 1946. Mercury output, on the other hand, was marked by its 8th consecutive annual increase. Uranium ore production gained and was valued at $114 million compared with 1957's $78 million.

The nearly general decline in the mineral industries was attributed by the Bureau of Mines to lower demand due to economic conditions, termination or slowing down of Government stockpile purchases, withdrawals from inventories, and increased competition from foreign mineral producers in domestic as well as world markets.

Import Quotas for Lead and Zinc

Consumption of lead and zinc declined in 1958, reflecting a lower level of general industrial activity. A sharp decline in Government procurement further restricted demand. Decreases in domestic mine production were insufficient to offset continued large-scale imports and to prevent stock buildups.

An investigation by the Tariff Commission indicated the domestic mining industry was being damaged by imports and, as a result, the Commission recommended corrective action to the President. Congress considered but did not enact legislation recommended by the Department of the Interior to aid directly domestic mine producers. An international conference, sponsored by the United Nations, explored methods whereby world surpluses of lead and zinc could be reduced.

To provide an appropriate and immediate remedy, President Eisenhower set import quotas, effective October 1, allocated among exporting countries. The quotas were established at 80 per cent of average, United States imports, 1953-1957.

The imposition of import quotas and an upturn in consumption during the last quarter of the year were reflected in price rises in zinc from 10 cents a pound on October 1 to 11½ cents November 7. Lead rose from the year's low of 10.75 cents in August to 13 cents October 14. The year ended with a firmer tone to the market generated by decreasing stocks and larger sales volumes.

Copper Outlook Improved

Mine production of copper in the United States in 1958 was almost 10 per cent lower than that in 1957; refinery production from primary and secondary sources declined approximately eight per cent; and consumption dropped about 17 per cent. Net imports of copper decreased nearly 24 per cent while exports of refined copper were about the same as in 1957. Producers' stocks of refined copper dropped substantially in the last quarter of 1958, lowering the quantity in inventory at year's end about 20 per cent below that of January 1, 1958.

The price of copper, which had reached a low of 25 cents per pound in January, advanced to 26½ cents in July and to 29 cents in October, where it remained until early December. The Act suspending the U. S. import tax on copper expired on June 30, 1958, whereupon a duty of 1.7 cents per pound went into effect.

Throughout the first half of 1958 the copper industry was faced with the continuing problem of over-supply. However, the rise in demand created by improved industrial activity, coupled with curtailed output of the metal, due to work stoppages and voluntary cutbacks, resulted in more favorable conditions during the second half of the year. The domestic over-supply situation was tempered by Government acquisitions of copper under floor-price contracts.

Aluminum Output Declines But Industry Expects Rising Demand

Primary aluminum production in 1958 was 1.56 million tons, a decrease of five per cent from 1957 and seven per cent below the record high of 1956. The lower rate reflected a drop in demand created by the recession. However, markets began improving by mid-year and at year's end production was at the same rate as at the end of 1957.

While there was reduced demand for aluminum in 1958, the industry had enlarged production capacity by December to more than 2.1 million annual tons, 300,000 tons more than at the start of the year. Two new producers, Ormet Corporation and Harvey Aluminum, started operations and Reynolds Metals Company and the Kaiser Aluminum and Chemical Corporation each activated new potlines. New potlines, replacing obsolete facilities, were energized by the Aluminum Company of America when it became the first industrial consumer of power from the St. Lawrence Seaway Project. Other facilities in various stages of construction will, upon completion, raise the United States' annual primary aluminum capacity to 2.6 million tons.

The price for primary ingot was reduced two cents in April to 26.1 cents per pound. Effective August 1, the price was raised to 26.8 cents.

Domestic Bauxite Output

Domestic output of bauxite in 1958 was approximately 1.36 million long dry tons, four per cent below 1957. Production in the last half of 1958 was significantly greater than in the first half. Imports of bauxite, estimated at 7.7 million tons, marked an increase of nine per cent over 1957. Jamaica supplied 63 per cent of the imports, Surinam, 30 per cent, and British Guiana and Haiti, combined, seven per cent. United States production represented about 15 per cent of the new supply, compared with 17 per cent in 1957.

Tariffs were suspended by Act of Congress until July 16, 1960, on crude bauxite, calcined bauxite, and alumina used for the production of aluminum. Alumina in significant quantities was imported for this use during the year.

The Ormet Corporation became the fourth domestic alumina producer when it began operating its Burnsida, La., plant. This plant, designed for an annual capacity of 350,000 tons of alumina, processes Surinam bauxite.

Interest was shown in deposits of bauxitic material in the Territory of Hawaii. The Bureau of Mines, in cooperation with the Territory and the Federal Geological Survey, conducted preliminary metallurgical tests on mineral samples from the Islands. Although no products were obtained that could be considered economically competitive with those from commercial bauxite deposits, the Bureau feels additional studies are justified in view of the apparent immensity of the deposits

Magnesium, Magnesium Compounds

Production of primary magnesium in 1958 was 30,400 tons, down 63 per cent from 1957. Producers reported cutbacks due to accumulations in stocks. Shipments, which decreased 36 per cent below 1957, increased during the fourth quarter of 1958.

In November 1958, Alabama Metallurgical Corporation began building a 7,000-ton plant at Selma, Ala., to produce magnesium from dolomite. This installation is the first primary magnesium plant to be built with private funds since World War II.

Production of 6.5 million tons of magnesite and dolomite for basic refractories in 1958 represented an increase of 10 per cent over 1957. H. K. Porter Company, Inc., completed construction of a new sea water magnesia and basic refractories plant at Pascagoula, Miss.

Titanium Metal, Pigment Output Up

Following a cutback in military requirements for titanium metal in mid-1957, production of titanium sponge dropped steadily to about 10 per cent of the industry's capacity by mid-1958. Output began to increase during the third quarter 1958 and total production for the year was about 4,500 short tons, or about one-fourth the 1957 record of 17,000 tons.

Titanium sponge metal consumption for the year was about 3,400 tons,

less than half the 8,200 tons used in 1957. The price of titanium sponge metal dropped during the year from $2.25 to $1.82 per pound for Grade A-1 and from $2 to $1.70 per pound for Grade A-2.

Because of the decrease in titanium metal production in 1958, consumption of rutile was well under the 1957 level. Production of titanium pigments was about 10 per cent below the previous year. Consumption of ilmenite in 1958, mainly for pigments, was less than in 1957.

Domestic ilmenite production for 1958 decreased about 20 per cent to 600,000 short tons. Ilmenite imports in the first 8 months of 1958 were 264,000 tons and for the entire year are estimated to have been about 350,000 tons, 24 per cent below 1957. Rutile output decreased about 12 per cent to an estimated 9,400 tons. Rutile imports decreased to 30 per cent of the 1957 total to 26,000 tons.

The price range for ilmenite concentrate dropped during the year from $26.25 to $30 per long ton to $23 to $26 per long ton. The lower demand for rutile was reflected by a drop in price from 6 to 6¼ cents per pound at the beginning of 1958 to 4¾ to 5 cents per pound at the end of the year.

Gov't Purchase Program Absorbs Substantial Part of Mercury

Mercury production at domestic mines in 1958 reached 37,000 flasks, a 7 per cent gain over 1957 and the largest since 1944. It marked the eighth consecutive annual increase.

Greater output of mercury in California, Nevada and Idaho was only partially offset by declines in Alaska and Oregon. In the first 9 months of the year, industrial consumption fell 10 per cent below the high average annual rate for 1955-57. On the other hand, during that period 15,000 an 2,200 flasks, respectively, of domestic and Mexican mercury were withdrawn from market through Government purchases under the General Services Administration guaranteed-price program. General imports approximately one-third of the 45,000-flask rate of 1957. Exports and reexports again were only a small fraction of imports.

Mercury prices ranged from $220 to $230 a flask (76 pounds) in January, and after strengthening to $237 to $243 in September, dropped back to about the January level as the year closed.

Iron and Steel

Iron ore output was cut back as much as 50 per cent in many of the nation's mining districts in the first part of 1958, and preliminary estimates indicate that by the year's end the totals for both tonnage and value were down 36 per cent from 1957. The 1958 production is estimated at 66 million tons, compared with 104 million in 1957. Imports of iron ore in 1958 were about 27 million tons, down more than 20 per cent from 1957. Thus, the nation's total new supply was about 34 per cent below 1957. Iron ore stocks were almost normal by the end of the year.

Steel demand increased sharply during the last four months of 1958. However, steel and pig iron production will be approximately 25 and 35 per cent, respectively, below 1957's 112.7 million tons for steel and 78.4 million tons for pig iron. The steel mill operating rate for the last three months of 1958 was between 70 and 75 per cent of capacity, compared with the year's low of 47.8 per cent in April. Although estimated scrap consumption during 1958 was 27 per cent lower than for the previous year, total scrap used made up 49.7 per cent of the total charge (scrap plus pig iron), compared with 49.1 per cent in 1957.

Ferroalloys Metals Down Sharply

Despite cutbacks in nickel production by most producers and a strike of workers at the Sudbury, Canada, mines and Port Colborne, Canada, refinery of the International Nickel Co. of Canada, Ltd., output was substantially greater than demand. Consequently, available stocks in North America in the hands of International Nickel and the United States Government on June 30 totaled 67,500 short tons, exclusive of nickel in the national strategic stockpile. However, stocks held by consumers in the United States had declined from 23,300 tons at the beginning of 1958 to 12,000 tons on September 30. Domestic production of recoverable nickel increased about 3 per cent to 11,000 short tons in 1958.

Although free-world production of cobalt declined in 1958, output in the United States was about 21 per cent greater than in 1957. Most of the cobalt metal produced in the United States in 1958 was delivered to the Government.

Tungsten production continued the decline started in late 1956 after suspension of Government stockpile purchasing. In June 1958, the Hamme mine of Tungsten Mining Corp. in North Carolina and the Nevada-Massachusetts Co. operation in Nevada closed. During the last half of the year, byproduct output from the Climax Molybdenum mine in Colorado and the Union Carbide Nuclear Co. mine in California comprised virtually all domestic production.

The Government's domestic car-lot manganese-purchase program for ore containing 40 per cent or more manganese continued throughout 1958, but preliminary estimates are that ore production was somewhat lower than for 1957. Estimates of ore consumption and ore imports also were substantially lower than for 1957.

Molybdenum production, hampered by a strike at the Climax mine and by a cutback in operations at most byproduct plants, was the lowest in several years.

Termination of the domestic purchase program for chromite ore and concentrate in mid-1958 led to the closing of all chromite mines and mills in California, Oregon and Alaska and to a sharp decrease in chromite production.

Gold, Silver and Platinum

Domestic mine production of both gold and silver in 1958 reached the lowest point since 1946, again reflecting principally the lower output of base-metal ores yielding byproduct gold and silver. The 1958 output of gold was estimated at $60 million, a drop of about 5 per cent from the $63 million of 1957. Output of silver was estimated at $30 million, about 14 per cent lower than 1957's total of $34.5 million. Platinum-group metals, recovered from domestic placers, were the lowest since 1948.

Uranium Mining Expansion Continues

Production of domestic uranium ore increased nearly 50 per cent, compared with 1957 and totaled about 5 million tons, valued at $114 million, f.o.b. mine. The 1957 value was $78 million.

Uranium concentrate production was at a rate of about 14,000 tons a year, compared with 10,000 tons in 1957 and 6,000 tons in 1956. Producing states, in order of importance of uranium ore produced in 1958, were Utah, New Mexico, Colorado, Wyoming, Arizona, Washington, South Dakota, Alaska, California, Nevada, and Montana.

Twenty uranium mills, with a total capacity of 16,200 tons of ore a day, were in production in the United States at the end of 1958, compared with 14 mills, with an aggregate capacity of 10,000 tons, in 1957. Most of the increase in milling capacity was in the Ambrosia Lake area, near Grants, N. Mex.

Rare Metal Industries Grow

Mine shipments of rare-earth-element ores and concentrates in 1958 totaled about 1,000 short tons containing an estimated 625 tons of rare-earth oxides.

Domestic production of monazite was from South Carolina and Idaho;

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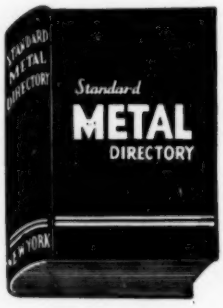

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euxenite was produced in Idaho and bastnaesite in California. South Africa continued as the principal foreign source of supply of monazite concentrate.

Prices of rare-earth compounds and elements dropped sharply in 1958, the decrease being attributed directly to advances in extraction and separation technology, and the rapid expansion of processing facilities. Europium, gadolinium, and samarium may have a use in atomic energy programs because of their neutron-absorbing characteristics.

The Bureau of Mines succeeded in producing high-purity cerium metal experimentally, in a specially designed electrolytic cell. The cerium was nearly free of iron, carbon, and hydrogen.

About 520 tons of hand-sorted beryl was produced in the United States in 1958. Most of this was sold to the Federal Government under a purchase program which will continue into 1962. New facilities of the Beryllium Corp. of Reading, Pa., at Hazelton, Pa., and the Brush Beryllium Company of Cleveland, Ohio, at Elmore, Ohio, produced reactor-grade metal for the Atomic Energy Commission.

United States production of columbium-tantalum mineral concentrates increased about eight per cent in 1958 to a new high. Imports and foreign production of columbium-tantalum mineral concentrates were about three per cent greater than in 1957. Increases in tantalite imports and production more than offset a decline in columbite.

Production of tantalum metal increased moderately, and output of columbium metal more than doubled in 1958. Production of ferrocolumbium and ferrotantalum-columbium declined. National Research Corporation, Cambridge, Mass., and U. S. Industrial Chemicals, Inc., Ashtabula and Cincinnati, Ohio, entered the field as metal producers. The Stauffer Chemical Co., Richmond, Calif., began building a $300,000 columbium and tantalum chloride plant. Prices continued to decline. By the end of 1958, pure columbium powder was $30-$50 per pound, and tantalum powder was $40-$65 per pound.

Production of cesium and rubidium compounds and metals increased several fold in 1958. The American Potash and Chemical Corp., Los Angeles, Calif., remained the world's largest producer of cesium and rubidium compounds.

Germanium continued to advance as an important semiconductor in the electronics field in 1958 as improvements in transistor manufacture permitted a wider range of applications. The supply of germanium was adequate as consumption remained at the 1957 level.

Adequate supplies of selenium are available during 1958 for the first time in a decade. Selenium producers intensified efforts to find new, stable uses for the element as the demand for selenium in rectifiers continued to decrease.

Tellurium, a previously neglected element, became prominent in 1958 with the announcement that it was a major component of thermoelectric devices. Widespread acceptance of these items in astronautic, military, and civilian uses would require quantities of tellurium in excess of present apparent supply.

Production of zircon concentrate in 1958 was about 26,100 short tons. Imports, all from Australia, totaled approximately 17,300 tons. This represented slightly over 55 per cent decrease from 1957 in each case. The average value per short ton was $45, a decrease of $8. Production of zirconium sponge, almost entirely reactor grade, was about 1,500 tons — over twice the 1957 figure. During the year the price declined from $7.50 to $5 per pound. Supply of reactor-grade zirconium overtook demand for the first time. During 1958, output ceased or decreased at three plants and increased at three others. Industry integration was characteristic; at year's end, all four metal producers were making their own tetrachloride and two producers were melting sponge to ingot.

Estimated hafnium production for the year was 46,000 pounds. The AEC invited bids for making high-purity hafnium from zirconium plant rejects.

Washington Report

(Continued from Page 4)

plants constructed under the program for a period of five years after they were built.

Sen. Robertson said it later became "apparent" that the Aluminum Co. of America and the Kaiser Aluminum & Chemical Corp. "were importing large quantities of aluminum from Canada and at the same time tendering surplus aluminum to the Government."

The Senator and his committee then called for renegotiation of the contracts to end the practice. In September, 1957, GSA revised its agreements with Alcoa, Kaiser and the Reynolds Metals Co., although Reynolds had no import contracts.

Sen Robertson said latest reports from GSA show that Alcoa has deducted $43,000,000 for imports, Kaiser $42,000,000, and Reynolds $11,000,000, chiefly in set-asides for military purchases.

Status of Stockpile

Strategic stockpile inventories as of June 30, 1958, equalled or exceeded basic objectives for 63 materials, the Office of Civil and Defense Mobilization reported to Congress. For 50 of these 63 materials, the maximum objective has also been achieved.

On the basis of June 30, 1958, market prices and the total strategic stockpile inventory of Group I materials was valued at $5,400,000,000. Of this amount, $3,600,000,000 was applicable to the basic and maximum objectives established on June 30, 1958 and $1,800,000,000 represented inventories in excess of these levels that were acquired under previously higher objectives.

A decrease is shown in the value of stockpile objectives and of inventories applicable to the objectives principally because of lower quantities to correspond to three-year stockpiling requirements and lower market prices on which the values are based.

During the January-June 1958 period approximately $6,500,000 was committed for open market purchases and $13,500,000 for transfers from Defense Production and Commodity Credit Corporation inventories.

Material values at almost $25,000,000 were delivered to the strategic stockpile from all sources during the six-month period, 14,000,000 of this being from open-market purchases.

Make Molybdenum Casting

Government scientists have produced the first casting of molybdenum, a metallic element which has excellent strength at high temperatures.

The Interior Department, in announcing the successful casting, described it as a major metallurgical breakthrough of importance to the nation's space and missile program.

Marling J. Ankeny, director of the Bureal of Mines, said scientists at the agency's Albany, Ore., laboratory had produced a simple cylindrical molybdenum casting. He said the metallurgists now are trying to improve techniques so intricate shapes can be created by the process.

United States reserves of molybdenum are estimated at more than 3,000,000,000 pounds comprising about 90 per cent of the world's known reserves. The largest reserves are in Colorado. Most of the rest are in Utah, Arizona, California, New Mexico and Nevada.

The reserves are enough for about 50 years at the present rate of production, the Bureau said.

Offers Copper, Iron Bills

Sen. Pat McNamara (Dem., Mich.) has introduced two bills in the Senate to aid marginal copper and iron mines in the interest of national security.

The copper bill (S-295) would authorize the Secretary of the Interior to buy copper ore at a reasonable profit to the producer, provided the mines' continued operation is considered necessary to the national defense and the mine cannot operate economically at current market prices.

His iron bill (S. 296) would authorize the Interior Secretary to pay an iron mine operator an amount for each ton produced which, when taken with the amount he would receive from the sale of the ore, would assure him a reasonable profit.

The Free World's Stake in Aluminum

By NATHANAEL V. DAVIS, President, Aluminum Limited

THE establishment of aluminum ingot production in Canada and its subsequent great expansion was undertaken to serve aluminum fabricators throughout the free world. About 85 per cent of our Canadian production is for export — since Canada, despite its high per capita consumption of aluminum, takes about 15 per cent of our production. As a result, we are vitally concerned with the status of aluminum in world commerce.

The company's largest export market is the United States. In the last ten years we have supplied over 1,600,000 tons to the U. S. economy. This tonnage has accounted for approximately 95 per cent of total primary aluminum imports into the United States — and nearly 75 per cent of all recorded aluminum imports in any form. A part of our tonnage has gone to supplement the production of the U. S. producers and a part has been supplied to the increasing number of independent fabricators who do not have their own source of primary metal.

Clearly, the United States market has been and continues to be an important one for your good neighbor, Canada. Our other major export markets are the United Kingdom and certain countries in western Europe. The company also sells important tonnages in over 30 other markets throughout the free world.

Incidentally, because we do business in many parts of the world, Aluminium Limited adopted in its name the spelling of the word for the metal used virtually all over the world outside North America.

About 20 per cent of the primary aluminum produced by all the nations of the free world moves into international trade; the remaining 80 per cent staying within its country of origin. The traditional exporting nations to free world markets have been Canada and, to a lesser extent, Norway. Each of these countries possesses certain natural facilities favorable to the production of aluminum in the form of abundant hydro-electric power resources close to deep-water ports. The producers in other countries have traditionally been mainly concerned with their domestic markets and infrequent exporters in significant volume.

Since World War II there has been a substantial growth in the production and consumption of aluminum throughout the free world. Nowhere has this been more evident than in the United States, where the industry has led the way in raising the per capita consumption to the highest level in the world.

We ourselves have invested in this period one billion dollars, mainly in Canada, to expand aluminum production for the United States and other markets. As would be expected, the international trade in aluminum has also shared in this growth. As this trade in aluminum has increased over these years, many of the tariffs and other forms of restrictions which date back to earlier days, have been reduced or abandoned.

Some of the major markets for primary aluminum abroad — such as Great Britain and the Benelux countries — now permit free entry of primary aluminum products. In this hemisphere both the United States and Canadian tariffs have been reduced in stages from a 3-cent level to a current level of 1¼ cents. Assisted by the removal of trade impediments and the growth in demand, and in spite of currency and exchange problems, the free world trade in aluminum during the decade following World War II has been strong and healthy. The period has, more often than not, been accompanied by actual shortages. These conditions stimulated large expansion programs, particularly in the United States and in Canada.

Inevitably, perhaps, the turn of the tide commenced nearly two years ago when expansion caught up with demand and the demand curve itself leveled for the first time in many years as general business went into a recession. Today, the industry as a whole has idle capacity and financial obligations geared to expanded plant which is not immediately usable. The main areas of temporary overcapacity are in the United States and Canada. At present there is increased and intensive competition among all producers in both domestic and international markets. Producers who are not traditional exporters are actively soliciting business and selling in international markets. Last, but not least, these conditions have caused a weakening of the price structure. To anyone who subscribes to traditional economic theory, these developments have come as no surprise. Difficult as these developments are to all of us in the industry, they should astonish no one. They are normal economic corrective forces designed to bring about most quickly a return to greater volume of consumption and a more satisfactory return on invested capital which we all look for in due course.

During the past 18 months a new factor has appeared in the form of Russian offers of primary metal on several international markets. Although the quantity of Russian metal sold has been small in relation to free world supply (approximately 1 per cent), the term of sales, which have included guaranteed differentials in price, have had a somewhat disrupting effect on international markets. To our knowledge no Russian primary aluminum has entered the United States market.

Beyond this, another influence has been awakened by current conditions —the appearance of protectionist theories — an influence quite opposite in character and effect from the natural economic corrective forces which are at work. This concept naturally concerns us deeply because it could radically alter the healthy pattern of the free world trade in aluminum which has developed over the years. Quite apart from its potential effect on international trade in aluminum, protectionism with consequent higher prices, would adversely affect the future of aluminum as a dynamic growth industry wherever located.

While the reasons may not be the same both in Europe and in this country, strong groups on both sides of the Atlantic are urging higher tariffs on primary aluminum. In Europe talk of raising tariffs is appearing in the plans for the European common market. As you know, the primary purpose of the common market is to achieve greater economic unity among its member nations. Trade between these countries is to be freed of restrictions over a period of years. All this is highly commendable and has been well publicized; not so commendable nor well known, however, are some of the plans to increase the tariff on certain products entering the common market

Talk given before the Executives' Club of Chicago on Sept. 26, 1958.

from outside nations such as the United States and Canada.

Aluminum ingot is a case in point. At present the six-nation area is a net importer of aluminum with import restrictions practically non-existent except in the case of France and Italy. Although no decision has been reached, reports indicate that the three producing nations are promoting the erection of a high tariff designed to prevent imports of primary aluminum from outside areas. Such a step, if made effective, would place behind a high tariff barrier the consuming powers of some 160 million people. It would tend to break up rather than consolidate the free world economy.

In the United States, the major producers of aluminum recently joined together in petitioning the federal government for increased protection against imports. Although it is a great temptation, it is not my intention to burden this eminent gathering by rebutting the arguments which have been advanced in support of this viewpoint. This is hardly the time or place to do so. However, I would like to mention some of the broad considerations which have not been touched upon.

Primary aluminum is inherently an international commodity. The essential raw material required, bauxite, comes from many lands and crosses many borders. In our own case, Canada has no bauxite and our smelting plants receive the necessary ore from the Caribbean, South America and Africa. Similarly, in the United States, producers rely mainly upon Caribbean and South American sources and are turning additionally to Africa and even the Far East for some of the basic raw materials. The various international components which go into the production of primary aluminum emphasize that it is not an industry which lends itself to narrow regional restrictive practices.

Net employment should be recognized as an important element in the formulation of trade policies. This is particularly pertinent in the case of primary aluminum. The production of primary aluminum requires less labor per dollar of output than almost any other basic industry. The labor component in primary aluminum is less than one-fifth that of average North American business. Since it is accepted that trade is a two-way affair, it follows, therefore, that to the extent reduced imports of primary aluminum are offset by reduced exports of other products, the net result is a loss in employment, not a gain in employment.

Turning briefly again to the matter of Russian aluminum, we do not wish either to minimize or exaggerate the potential dangers that all of us face from the type of society and economy existing in Russia. If sizable sales of communist aluminum demonstrate this to be a weapon in Russian economic warfare, we believe that all governments in the free world should take suitable measures to prevent damage to a vital private industry. Although we are ardent supporters of free trade and competition among friendly nations, we are convinced that a private industry alone cannot compete against the resources of a state. If, however, the appearance of Russian exports is used as a pretext for protectionism applied against friendly nations, the Soviet Union will have achieved a notable victory in the cold war.

The conflict between the philosophies of communism on the one hand and the freedom of the individual on the other is the major issue before the world today. It is important to all of us that the uncommitted areas of the world decide in favor of our system. The free enterprise system, to which the western world subscribes, will be judged by its ability to maintain high levels of consumption by providing goods and materials to the public at minimum economic prices. Protected regionalism is the very antithesis to such a basic concept. Protectionism and its corollary, an artificial price structure, are not designed to make the best use of efficient and low-cost production.

As President Eisenhower said at the conference in Washington on international trade policy in March of this year, "We cannot find safety in economic isolation at a time when the world is shrinking. For us to cower behind new trade walls of our own building would be to abandon a great destiny to those less blind to the events and tides now surging in the affairs of men."

At the same conference, Mr. Adlai Stevenson said in part, "We cannot, must not, dare not, turn the clock back to 1930. We cannot be at once advocates and opponents of growth, expansion and competition. We cannot be at once political internationalists and economic nationalists."

You can be sure it was an encouragement to business people in Canada and other countries when the United States recently reaffirmed its position as a leader in this philosophy by the extension of the reciprocal trade agreements program.

Aluminum — wonderful as it is — is subject to the same economic laws as wood, plastics, steel and other metals with which it is in competition. As you in this audience know probably better than I, the choice whether to use aluminum or a competing material, is frequently a question of price. If import restraints are built into the aluminum industry, the competitive position of aluminum can only be adversely affected. Aluminum is one of those materials which, because of its virtually unlimited mineral resources and its wide application, can be used to build better lives for the people of the world. It would be regrettable if this challenge were forfeited by burdening the industry with artificial restrictions.

It must be continually recognized that trade in one commodity should be considered with reference to trade in general. In the complex mechanism of modern industrialized life, the affairs of one business have become increasingly dependent upon the affairs of other businesses. Relating this to your own city of Chicago, which is a large market for aluminum — including Canadian aluminum I am happy to say—the Chicago area plays an important role in trade between the United States and Canada. Based on figures gathered in 1954, I think it is most impressive that the Chicago region exported more to Canada than the whole country of western Germany. With the increase in seaway traffic resulting from the St. Lawrence development, it is only natural to expect Chicago to become more and more concerned with international trade, whether it be in aluminum or any other product.

The broad concepts favoring increased freedom of trade between friendly nations run the risk of losing themselves in the clouds of generalities unless brought down to the level of your business, your neighbor's business or mine. Free world trade in aluminum happens to be my business. At first glance it may seem remote from the day-to-day business life in Chicago or in New York or London or Paris, but in fact this is not so.

There is not a man in Aluminium Limited, nor to my knowledge any member of the industry, whether he be American, British, German or French, who does not hold the conviction that this industry has vast expansion ahead of it by providing a material which will be of increasing usefulness to the public at large. Lest you think aluminum people are all starry-eyed optimists, a glance at the record over the years will show that when the industry has erred in its out-

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BRITISH COPPER MARKET HELD FIRMLY ESTABLISHED; MODERATE PRICE UPTREND LIKELY IF DEMAND GAINS

Tin Turns Easier on Failure of Council to Announce Agreement With USSR; Little Enthusiasm on Lead Prospects; Zinc Strength Exceeds Expectations

January 8, 1959

By L. H. TARRING
London, England

BY COMPARISON with some of the earlier months of the year December was one of the most stable in the copper market here. Price movement were over only a limited range and it was generally felt that the market had got on to a better basis than for a long while previously. After the acute scarcity of 1955 and early 1956 and the panic prices it caused, the long downward movement in prices from £437 a ton in 1956 to £160 early in 1958 was a discouraging and difficult period for nearly everyone connected with the copper industry.

In the last few weeks consumer demand on this side of the Atlantic has been very moderate indeed, in fact, apart from some occasional demand from Russia — which has not been in evidence for the last week or so— new buying has been singularly slow even when due allowance has been made for the quietness which normally accompanies the Christmas and New Year holidays and annual stock-taking period. The fact that prices were maintained in the face of this quietness did quite a lot to encourage the view that the market was now solidly established and that given any improvement in day-to-day business in the New Year, some moderate upward movement in values might occur.

Copper Stockpile Sale

Sentiment received something of a shock on December 31st, however, when the Board of Trade announced that it proposed to sell the remainder of the British Government's stocks of copper amounting to about 30,000 tons during 1959. Of the 30,000 tons some 4,000 tons are cakes for which there is not a very ready market and it was decided that these should be disposed of separately and of the remaining 26,000 tons some 11,500 tons are to be offered back to the original suppliers or their agents leaving 14,500 tons to be sold by open tender for delivery and pricing from February to November.

It was hardly surprising that this caused a temporary and fairly sharp setback in prices—since recovered—but on the whole there was fairly general agreement with the view expressed jointly by the two big Rhodesian producing groups that the announcement was to be welcomed as finally removing uncertainties as to the Government's stock disposal policy. It is felt that the 2,600 tons a month involved can be absorbed by the market without much difficulty and without seriously affecting prices. This view is taken despite the fact that present indications are to the effect that production on a world basis during 1959 should be fully adequate for foreseeable industrial requirements.

Apart from the substantial increase represented by a restoration of normal capacity working, compared with the reduced rates during much of 1958, the Bancroft and El Salvador mines are scheduled to start production this year. The hoped-for reasonable equilibrium between supply and demand during the coming 12 months is based on fairly optimistic views of the level of American economic activity and the belief that the European recession will give way to a better level of business, perhaps not immediately but from the second quarter of the year onwards. The important move towards increased convertibility of sterling and other leading European currencies is obviously a favorable development for an international commodity such as copper, in which dollar trading is an improtant item. Meanwhile on January 1st, the first steps were taken towards implementing the European Common Market. Exactly what repercussions this will have on copper and other base metals it is premature to guess but for the present it is perhaps rather unlikely that any significant changes will occur.

U. K. COPPER STATISTICS

The British Bureau of Non-Ferrous Metal Statistics reports U. K. stocks of copper at the end of October as 18,943 tons of blister and 55,743 tons of refined, compared with 19,278 tons and 65,814 tons a month earlier. The end-October figures include 30,589 tons of refined held by consumers, 6,610 tons in L. M. E. warehouses and 18,544 tons elsewhere. U. K. output in October was 10,022 tons primary refined and 9,997 tons secondary refined, compared with 10,738 tons and 9,257 tons during September. Full consumption details are given below:

Product PRODUCT	Oct.	10 mos. ending —31st Oct.—	
	1958	1957	1958
Unalloyed Copper Products			
Wire (1)	29,166	224,395	241,239
Rods, bars & sections	1,809	14,873	17,699
Sheet, strip & plate	5,441	48,078	47,327
Tubes	6,336	48,335	51,645
Castings & misc.	650	6,500	6,500
Alloyed Copper Products			
Wire	1,535	13,858	13,228
Rods, bars & sections	12,034	101,245	98,555
Sheet, strip & plate	8,362	74,432	73,874
Tubes	2,181	18,652	19,399
Castings & misc.	6,739	63,781	61,003
Coppre sulphate	3,477	37,899	21,422
Total all products	77,730	652,048	651,891
Copper content of output	65,190	537,242	551,061
Consumption of refined copper (2)	53,937	425,245	440,719
Consumption of copper and alloy scrap (3) (copper content)	11,253	111,997	110,342

Notes: (1) Consumption of H. C. Copper and cadmium copper wire rods for wire and production of wire rods for exports.
(2) Virgin and secondary refined copper.
(3) Consumption of copper in scrap is obtained by the difference between copper content of output and consumption of refined copper, and should be considered over a period since monthly figures of scrap consumption are affected by variations in the amount of work in progress.

Tin Trend Easier

After showing a modest further improvement in prices early in December to over £760 a ton, the London tin market later in the month developed an easier trend. This appears to have been due partly to the fact that the last week or two of the year is usually a pretty dull one as far as consumer demand is concerned, but perhaps mainly owing to the disappointment at the failure of the International Tin Council to make any announcement after its December meeting regarding agreement with Russia.

It will be recalled that at the November meeting it had been indicated that one of the main reasons for holding a meeting in December at all was the expectation that the negotiations with Russia would have been concluded. After the December meeting it was stated that it was expected that the negotiations with Russia would be completed before the end of the year but 1959 is already a week old and there has still been no news on this matter.

It might have been thought that the announcement after the December meeting that the I.T.C. approved arrangements for certain stocks of

AVERAGE BRITISH PRICES FOR COPPER, TIN, LEAD, ZINC

(Per Long Ton)

Mean of Bid and Asked Cash Quotation at Close of Morning Session on London Metal Exchange

	COPPER			TIN			LEAD		ZINC	
	Cash	3 Months	Settlement	Cash	3 Months	Settlement	Current Month	3rd Following	Current Month	3rd Following
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1954 Averages	248 17 11	239 17 7	249 0 11	719 8 11	709 17 7	720 6 7	98 8 12	94 7 4	78 5 4	77 16 11
1955 Averages	351 14 11	341 0 3	352 5 6	740 2 12	736 12 11	740 12 8	105 17 3	105 9 6	90 13 4	89 12 3
1956 Averages	328 14 5	324 13 1	329 1 8	787 14 9	774 7 7	788 13 3	116 6 5	114 8 9	97 14 3	95 3 7
1957										
April	241 19 2	242 15 9	242 2 0	774 4 9	768 7 6	774 17 6	111 17 5	111 14 1	98 7 6	94 13 5
May	237 17 5	238 1 2	238 0 3	765 8 1	763 8 6	765 15 3	99 9 3	99 16 1	85 15 7	82 8 3
June	227 2 8	228 16 2	227 5 9	762 10 0	759 14 9	762 16 10	91 13 9	91 19 9	74 6 1	73 16 4
July	217 10 12	219 11 9	217 14 9	753 2 8	750 3 8	753 13 1	90 12 3	91 4 11	75 3 1	73 14 11
August	208 12 3	210 12 7	208 15 9	740 0 9	748 18 1	740 6 8	91 14 6	92 0 3	73 17 10	73 13 9
September	193 18 2	197 5 1	194 3 4	739 13 7	739 16 11	740 0 11	89 16 9	90 9 1	73 1 9	73 7 5
October	186 9 8	190 0 9	186 14 7	731 12 2	728 15 8	731 17 5	85 18 1	86 10 1	69 3 7	69 4 4
November	187 18 7	191 17 9	188 3 4	730 5 3	710 12 7	730 10 6	83 3 4	83 6 2	67 10 6	67 1 3
December	181 8 8	185 14 5	181 12 0	730 11 3	728 11 3	730 16 6	73 4 3	73 18 2	62 15 11	62 19 2
1957 Averages	**219 8 10**	**221 0 3**	**219 12 10**	**754 15 4**	**747 10 10**	**755 3 11**	**96 12 9**	**96 13 2**	**81 11 7**	**80 1 1**
1958										
January	171 7 5	174 0 5	171 10 11	730 15 5	725 0 3	731 0 5	72 3 4	72 10 11	62 11 4	62 3 7
February	162 17 9	164 2 11	163 0 9	731 11 0	732 2 9	731 17 6	74 3 7	74 0 6	63 17 2	63 10 11
March	170 2 9	171 4 5	170 5 11	731 5 9	735 13 1	731 12 5	74 15 9	74 11 3	63 9 9	63 11 2
April	175 12 0	176 18 6	175 15 0	731 0 3	729 18 6	731 7 6	72 17 5	73 0 4	62 7 6	62 11 7
May	178 15 11	180 15 1	178 19 1	730 15 11	733 19 6	731 1 5	72 2 9	72 9 6	61 17 1	62 5 3
June	194 12 3	196 3 8	194 15 6	730 5 6	732 16 8	730 10 6	73 5 6	74 3 1	64 3 6	64 13 0
July	199 16 4	200 11 8	199 19 9	731 4 4	733 4 2	731 9 7	71 9 8	72 19 2	63 11 11	64 5 6
August	205 16 3	206 1 2	205 19 6	730 9 0	731 11 0	730 15 0	70 7 8	71 17 1	63 16 8	64 11 4
September	209 6 3	209 8 6	205 9 1	718 2 11	713 17 1	718 19 1	70 10 5	71 17 1	65 0 8	65 7 9
October	236 5 9	229 15 5	236 13 1	740 16 9	735 11 6	741 8 3	74 1 0	74 11 6	70 9 4	69 9 10
November	242 19 6	236 11 9	243 4 3	757 12 6	759 3 9	758 0 6	75 11 8	75 16 9	75 5 6	72 16 1
December	220 19 11	220 14 8	221 2 10	756 9 1	758 1 2	756 16 2	72 4 1	72 6 7	74 6 10	71 5 1
1958 Averages	**197 13 3**	**197 9 3**	**197 16 11**	**734 18 6**	**734 17 11**	**735 6 1**	**72 15 8**	**73 6 10**	**65 17 12**	**65 10 12**

tin held in producing countries to be transferred, through barter transactions, to the strategic and critical materials stockpile of the U. S. A. would be a helpful feature. This appears, however, to have had much less effect on market sentiment than the continuing fears as to the possible eventual effect of Russian sales.

The market reaction to the basic tin situation remains interesting since statistical forecasts, even allowing for a continuation of Russian exports at the 1958 level (although Soviet promises have been made that they will be reduced), continue to show an apparent appreciable shortfall of supplies compared with industrial requirements. Grade A tin is reported to be in quite scarce supply and it is certainly noticeable that the Eastern market and in turn London, is now apt to react fairly sharply to manifestations of consumer buying interest, particularly from the U. S. A.

The position remains, therefore, that theoretically tins seems bound to go up to at any rate the middle price range in the Agreement but with neither consumers nor dealers as yet having much solid confidence in the outlook, it is an unconscionable time doing so.

Little Enthusiasm in Lead

The lead market having just ended a very difficult year starts 1959 without very much enthusiasm. Despite the recovery that has already occurred in the U. S. domestic market and the hopes of further improvement in the coming months, and despite a growing belief that 1959 will also see a turnround in the general level of economic activity in Europe, the immediate lead supply position seems to be a very easy one and there is an uncomfortable feeling that the full effects of the U. S. import quotas imposed last October may not yet have been felt on this side of the Atlantic.

Apart from the usual seasonal quietness over the Christmas and end-of-the-year holidays, consumption in Europe does not seem to have varied very much, although it is undoubtedly below the best levels of the last year or so. In the U. K. the cable industry accounted for most of the drop on consumption: but with the Government having withdrawn from its earlier anti-inflationary policy, it is hoped that the demand for cables from the Post Office and Electricity Boards may show some improvement. The longer term outlook is, of course, still dependent on the outcome of the further United Nations conference which is expected

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U. K. TIN STATISTICS

U. K. consumption continues to run at a much lower rate than in 1957, according to figures issued by the British Bureau of Non-Ferrous Metal Statistics. During October consumption was 2,072 tons compared with the September figures 1,784 tons, with U. K. stocks at the end of October standing at 20,135 tons against 19,942 tons the previous month and 19,676 tons at the end of August. Full consumption details are given below:

Trade	Oct. 1958	10 mos. ending —31st Oct.— 1957	1958
Tinplate	1,080	9,811	8,108
Tinning:			
Copper wire	44	448	425
Steel wire	11	83	80
Other	69	606	614
Total	124	1,137	1,119
Solder	205	1,658	1,562
Alloys:			
Whitemetal	258	2,294	2,378
Bronze & gunmetal	200	1,981	1,906
Other	36	318	340
Total	494	4,593	4,624
Wrought tin (1)			
Foil & sheets	17	229	208
Collapsible tubes	31	282	235
Pipes, wire & capsules	3	51	32
Total	51	562	475
Chemicals (2)	108	902	835
Other uses (3)	10	90	94
Total all trades	2,072	18,753	16,817

Notes: (1) Includes Compo and "B" metal. (2) Mainly tin oxide. (3) Mainly powder.

U. K. LEAD STATISTICS

According to the British Bureau of Non-Ferrous Metal Statistics, lead stocks in the U. K. at the end of October dropped to 40,216 tons (31,274 tons imported and 8,942 tons English refined) compared with 48,865 tons at September 30th. Production also increased from 6,957 tons during September to 7,405 tons during October. Full consumption details are given below:

	Oct. 1958	10 mos. ending —31st Oct.— 1957	1958
Cables	8,998	96,591	83,810
Batteries — as metal	2,763	23,381	24,432
Battery oxides	2,128	20,222	21,909
Tetraethyl lead	1,845	17,640	16,155
Other oxides and compounds	2,629	19,980	21,267
White lead	803	8,133	7,531
Shot	437	3,619	3,868
Sheet and pipe	6,755	57,506	55,533
Foil & collapsible tubes	334	3,703	3,485
Other rolled & extruded	637	5,417	4,869
Solder	1,190	10,632	11,110
Alloys	1,671	14,125	15,584
Miscellaneous uses	1,166	10,617	10,432
Total consumption	31,356	291,566	279,980
Of which:			
Imported virgin lead	14,928	140,284	138,847
English refined	7,657	66,753	63,316
Scrap including re-melted	8,771	84,529	77,817

U. K. ZINC STATISTICS

During October U. K. zinc stocks dropped from 45,784 tons to 39,341 tons, reports the British Bureau of Non-Ferrous Metal Statistics, with consumers holding 16,043 tons at October 31st. U. K. smelters' output was 5,463 tons. Consumption was again higher at 29,858 tons, agianst 26,747 tons in August. Details are given below:

	Oct. 1958	10 mos. ending —31st Oct.— 1957	1958
Brass	9,240	80,241	78,689
Galvanizing	9,533	88,368	74,265
of which: General	3,184	28,336	27,840
Sheet	2,728	30,071	17,612
Wire	1,842	17,507	16,902
Tube	1,799	12,454	11,911
Rolled zinc	2,572	19,124	21,080
Zinc oxide	2,636	22,845	22,280
Zinc diecasting and forming alloy	4,175	35,433	39,495
Zinc dust	742	9,509	8,569
Miscellaneous uses	940	9,762	9,218
Total all trades	29,838	265,282	253,596
of which:			
Slab zinc			
High purity (99.99%)	4,589	38,921	43,005
Electrolytic and high grade (99.95%)	5,808	47,887	48,788
G.O.B. Prime Western & debased	11,637	106,696	93,015
Other virgin material	235	2,491	2,406
Remelted zinc	541	4,904	4,486
Scrap—(zinc content)—			
Zinc metal, alloys & residues	2,545	28,383	26,152
Brass and other copper alloys	4,483	36,000	35,744

Free World Aluminum

(Continued from Page 11)

look it has usually erred on the conservative side.

In North America aluminum consumption over the years has doubled every decade. As I said earlier, this country has developed the uses of the metal to a level exceeding all other markets. I don't need to describe to you the uses to which aluminum is put in the building, automotive or electrical industries. You see these uses every day, but what you see is only a beginning. This industry having reached a fair size, you sometimes hear it described as a mature industry. This adjective, in the broadest sense of having reached full development, just does not apply. The imagination, efficiency, wealth and drive which characterizes the U. S. economy hasn't been lacking in the development of aluminum markets here — and there is no indication of any weakening ahead. Coupling the vigorous North American economy to the qualities of what is still a relatively modern metal, maturity for the industry lies a long way ahead.

Consumption in other markets of the world is not so great per capita as here. A great amount of research, development and promotional work has been and is being done by the major producers and fabricators abroad. Indeed they have shown leadership in numerous fields. While older traditions sometimes mean slower change and many of the world markets must pattern their rate of economic growth to their capital resources, increased consumption of aluminum and other products is inherent in their future.

It is difficult to generalize about the many free world markets which range from the heavily industrialized areas of Great Britain and western Europe to the predominantly agricultural and emerging economies in Africa. Nevertheless, each and every one aspires, as we do, to higher standards of living — and they are all on the move. Many uses of aluminum which we consider commonplace in North America are not so commonplace abroad. These so-called proven uses will surely fit the markets of the rapidly expanding economies of immense areas. Is it unrealistic to expect a country such as India, for example, to increase its consumption per capita, in due course, to 1/10th of that now prevailing here? This would mean the consumption of approximately 500,000 tons, or the equivalent of nearly 25 per cent of the total United States production capacity.

I trust you will agree that this industry has more than ample opportunities for growth ahead. These opportunities do not relate to our company more than to any other aluminum producer. This is the free world's stake in aluminum.

Earlier I referred to some of the temporary problems which face us. If these problems are approached recognizing the importance to the free world of advancing along the path of sound economic expansion, they should assume diminishing importance and permit us to get on with the real task ahead.

I venture to say that this task can, should, and will be done by the unaided initiative of the industry itself in the true spirit of free enterprise.

'58 Activity Declined in U. S. Titanium Industry

Washington — Except for a 5 per cent increase in shipments of titanium dioxide pigments over 1957 shipments, all segments of the domestic titanium industry declined markedly in 1958, according to the Bureau of Mines, United States Department of the Interior. Production of ilmenite was down 21 per cent to 600,000 short tons and output of titanium pigments, which uses virtually all of the ilmenite, was down 9 per cent below the previous year. Rutile production decreased 35 per cent to 7,000 short tons. Shipments of rutile dropped to 1,700 short tons, the lowest since 1934. Production of titanium sponge metal for the year was about 4,500 short tons or 25 per cent of the peak output in 1957; consumption fell sharply to less than one-half that of the previous year. Production and consumption of titanium metal showed an increasing trend toward the end of the year.

Following the cutback in military requirements for titanium metal in mid-1957, production of titanium sponge dropped steadily to about 10 per cent of the industry's capacity by mid-1958 Output began to increase during the third quarter 1958 and total production for the year was about 4,500 short tons or about one-fourth of last year's peak output of 17,000 short tons. Titanium sponge metal consumption for the year was about 3,700 short tons, less than half of the 8,200 short tons consumed in the previous year.

In the 9-month period ending September 30, 1958, the United States imported 284,276 short tons of ilmenite concentrates, a 19 per cent decrease below the same period in 1957.

British Metal Markets

(Continued from Page 13)

to be held in March. Although there remain a number of countries who favor international regulation of lead supplies, it is not easy to see that there has been much change in the attitude of those countries which have so far opposed it.

Zinc Tops Expectations

During the past month the zinc market here has made a better showing than many people had anticipated. The marked strengthening lately of the U. S. domestic situation has, of course, been a helpful feature and the continued high level of demand for Special High Grade, thanks mainly to the activity of the motor car industry here, has helped to keep total consumption at a reasonably good level. Even so, it had been thought that by the end of the year the market on this side of the Atlantic might have begun to be troubled with increased supplies as a result of the U. S. import quotas but, in fact, there has been no evidence of this. It may be that the diversion of some supplies to Europe has still to come but meanwhile, on the London market nearby metal has been in very tight supply and a substantial backwardation has persisted in prices.

European consumption of zinc will, it is hoped, show an improvement later this year but there is really not much expectation that the first quarter will see any significant improvement. The coming into force of the European Common Market may eventually help matters but it is doubtful whether the initial steps in this rather long drawn out program will be much of a factor for the time being. Probably of more significance is the greater convertibility of sterling and other main European currencies, together with the devaluation of the French franc to a more realistic level. A feature which has undoubtedly helped the market for the time being, but which for the future remains very uncertain, is the fact that Russia and Poland, both substantial exporters of zinc in the last year or two, have shown no anxiety to make any large offers for 1959.

NICKEL-CADMIUM BATTERIES

Nickel-cadmium storage batteries, which have a life expectancy of 20 years and can provide the starting power of a conventional battery four times their weight and volume, are used widely in commercial and military aircraft.

DOMESTIC LEAD PRICE REDUCED 1c TO 12c N.Y.; U.S. POSITION ON BARTER PLAN CALLED FACTOR

Cite Discrimination by GSA on Payment for Metal Refined Abroad; Custom Smelter Copper Quotation Up; Zinc Unchanged; Tin Steady

January 19, 1959

THE DOMESTIC metal markets made the transition from 1958 to 1959 with scarcely a ripple. Copper, lead and zinc prices were all unchanged at the producer level but the custom smelter quotation for the red metal climbed. At this writing, smelters, who have again leap-frogged the producers, are quoting 29.50c a pound delivered for electro copper, compared with the long-established 29.00c producers' level. There was no change in lead and zinc pricewise, with the markets steady despite light demand.

Tin prices were fairly steady despite day-to-day fluctuations. Silver was stronger, rising to 90.125c an ounce on January 8. Quicksilver was easier with spot metal available at $218 to $221 per flask of 76 pounds.

Smelter Copper Price Up

Custom smelters increased their electro copper price to 29.50c on January 12, a half-cent rise over the 29.00c level established on January 22. Previously, the smelter quotation had been established at 28.50 to 29.00c on December 4. The range narrowed to 28.75 to 29.00c on January 19, and the flat 29.00c price came into effect on January 22.

The half-cent increase on January 12, to 29.50c was something of a surprise. Aside from the sharp uptrend in London and the activity and the higher prices that prevailed on the domestic Commodity Exchange, the nature of the domestic consuming demand was not of such magnitude as to have made a rise in price seem imminent. The rise in the smelter quotation was probably as much the result of the limited supply of copper that they have available for sale as it was the volume of business that they actually did.

Smelter intake of scrap has been decidedly limited. While their intake of foreign concentrates has been good, it has been more profitable for the smelters to ship the refined copper abroad and sell it there, rather than pay the 1.70c a pound import duty and sell the metal in the domestic market. As of this writing, smelters were offering to buy scrap copper on the basis of 23.875c a pound for No. 2 heavy copper and wire scrap.

LEAD CUT 1c TO 12c LB.

American Metal Climax, Inc., on January 23 reduced its price for lead, free of any quota restrictions, delivered New York basis, to 12.00c a pound, a drop of 1.00c from the 13.00c quotation in effect since October 14 when there was a rise of 0.50c. The company said "it was forced to reduce its price by the actions of U. S. agencies in connection with the so-called barter program and by the unrealistic differential between the foreign and domestic prices for lead."

The reference to the barter program was believed aimed at its inadequacy as a market support and to the fact that the General Services Administration in barter deals reportedly uses a different price basis for pig lead produced outside the U. S. as compared with pig lead produced in the U. S. for foreign ores.

With smelters at 29.50c, more business has been going to the large primary producers who were adhering to their 29.00c quotation. But even at the 29.00c level, the buying hardly could be termed active.

Trade circles continued to argue whether rising prices for copper abroad and in some segments of the domestic market will bring about an advance in the large primary producers' quotation. The producers' 29.00c level has been in effect since late October. Producers, so far, have resisted pressure for an increase. The producers pointed out that domestic stocks are low and temporary shortages of spot metal prevail on the London market. But, they added, they expect supplies to ease in coming months if the market picture is not changed by buying in advance of the mid-year expiration of wage contracts in the domestic mining industry.

Foreign prices have generally been stronger. Copper on the London Metal Exchange closed at the equivalent of around 28.71c a pound on January 19. The large Belgian producer, Union Miniere du Haut Katanga, on January 13, boosted its price 90 points to 29.025c a pound c.i.f. New York. The French agency (GIRM) the same day increased its quotation by four francs to 320 francs per kilo, equivalent to 28.58c a pound f.a.s New York. These foreign prices do not include the U. S. import duty of 1.70c a pound.

December Copper Statistics

The December copper statistics appeared to have disappointed the London trade, judging by the weaker tone which developed on the London Metal Exchange on January 15, the day after the figures were released. Actually, the domestic copper statistics for December made a better showing than had been anticipated. In some quarters concern was felt over the shrinkage of refined stocks to a dangerously low level, dangerous in the sense that if any work stoppages should occur, a very tight squeeze might again develop. Trade quarters here believed the only adverse aspect was the big increase in foreign primary production, and the December gain of about 25,000 tons did not reflect the further increase that will take place as a result of the settlement of the strike at the properties of the International Nickel Co.

Domestic refined copper statistics follow, in tons, with the November totals in parentheses: production, 146,978 (128,048); deliveries to fabricators, 116,310 (131,188); stocks in producers' hands at end of month, 80,722 (93,596). Refined output for the year came to 1,446,540 tons, compared with 1,616,964 tons in 1957. Deliveries to fabricators for 1958 totaled 1,179,416 tons, as against 1,277,946 tons in 1957. Stocks in producers' hands at the end of 1958 totaled 80,722 tons compared with 181,024 tons at the end of 1957.

Lead, Zinc Barter Dealings

If domestic and foreign lead producers have been banking on barter deals to pull these metal markets (particularly lead) out of the rut, they appeared to be doomed to disappointment. Instead of easing up on the restrictions that have made barter deals difficult and at times impossible, Washington authorities were reported to be throwing more obstacles in their path.

The latest development that has thrown a big monkey wrench into the barter situation were the instructions the General Services Administration is reported to have given the Commodity Credit Corp. concerning the price

basis on which barter deals have been made in the past.

The difference between the foreign and domestic price levels has made it possible to put through several barter deals, some of which have entailed 4,000 to 5,000 tons. But the instructions that the GSA is reported to have given the CCC is that henceforth barter deals involving foreign refined lead are to be based on a price of 10.80c a pound, with the CCC absorbing the import duty. Importing circles here were of the opinion that if these reported regulations are permitted to remain in effect, lead barter deals will virtually cease.

Marketwise, a fair volume of business was being done for January and February shipment. The bulk of such business was at the average prices for each of these months. Some orders also were placed at the spot price of 13.00c New York and 12.80c St. Louis.

Fairly good business also was consummated for zinc on the basis of 11.50c a pound East Et. Louis for the Prime Western grade. Steadiness of the demand has pleased producers although it was admitted that the market could stand greater activity. The barter restrictions mentioned above do not seem to apply to zinc.

December Zinc Statistics

The slab zinc statistic for December made a good showing in spite of the fact that the output for that month was some 10,000 tons larger than in November while shipments to domestic consumers were about 6,500 tons smaller than in November.

December zinc figures for all grades, follow in tons with the November totals in parentheses: production, 75,503 (65,174); shipments to domestic consumers, 76,862 (83,394); shipments to all destinations, 77,010 (83,606); stocks in producers' hands at end of month, 190,237 (191,744). Production for the year totaled 828,902 tons against 1,057,450 tons for 1957, while total shipments last year came to 805,325 tons compared with 959,568 tons in 1957.

Aluminum Steady

Primary aluminum prices held steady, on the basis of 26.80c a pound for the 30-pound primary ingot, 99.5 per cent plus grade, f.o.b. Of interest to the trade was a survey by Aluminum Co. of America. Alcoa reported that a typical 1959 U. S. passenger car utilizes aluminum in record quantities, thus continuing a 10-year upward trend. The American car industry, in 1959, is expected to consume over 283,000,000 pounds of aluminum. Usage per average 1959 car is put at 51.5 pounds, 9 per cent more than was used in 1958.

Tin Fairly Steady

Spot Straits tin at New York was quoted at 99.375c a pound on January 16, compared with the 99.125c for December 11 last quoted in this space. The high for the December 11-January 16 period was the 99.375c for January 16. The low for the period was the 98.00c price registered on January 2.

Silver Price Advances

The New York silver price has advanced during the month in review from the 89.625c an ounce level established on December 12. On January 17 the price was advanced 0.25c an ounce; by 0.125c on January 7, and by another 0.125c on January 8 to 90.125c an ounce.

Quicksilver Declines

Quicksilver continued to slide downward during the month in review. On December 29 spot quicksilver was available to $218 to $221 per flask of 76 pounds, as against the last previously quoted range in this space of $222 to $225. Some quarters early in January indicated that the spot supply was tightening.

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NATIONAL BUSINESS PRESS **425 West 25th Street, New York 1, N. Y.**

Daily Metal Quotations for December, 1958

The following quotations are taken from the Daily Metal Reporter*
(In Cents Per Pound)

DECEMBER	Copper					Tin		Lead		Zinc					Aluminum	Antimony	Silver
	Producers' Price Del. Conn.	Custom Smelters' or Outside Price	Electro f. o. b. Refinery	Lake Del.	Aver. Prompt Electrolytic Export Price F.a.s. N. Y.	Straits New York Spot	Straits New York Prompt	New York	Outside St. Louis	Prime West. f. o. b. E. St. Louis	Prime West. Del. N. Y.	Brass Spec. f. o. b. E. St. Louis	High Grade Delivered	Spec. High Grade Delivered	30-Lb. Ingot 99½% Plus (f. o. b.)	Domestic Spot 99.5% f.o.b. Laredo	(Cents Per Ounce) New York
1	29.00	29.00	28.60	29.00	28.75	99.25	99.125	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	90.125
2	29.00	29.00	28.60	29.00	28.50	99.25	99.125	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	90.125
3	29.00	28.50	28.35	29.00	28.00	99.00	99.00	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	90.125
4	29.00	28.75	28.35	29.00	28.00	99.00	98.875	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	90.125
5	29.00	28.75	28.35	29.00	28.00	99.25	99.125	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	90.125
6	29.00	28.75	28.35	29.00	28.00	....	....	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	....
8	29.00	28.75	28.35	29.00	28.00	99.25	99.125	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	90.125
9	29.00	28.75	28.35	29.00	28.00	99.125	99.125	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	90.125
10	29.00	28.75	28.35	29.00	28.00	99.125	99.125	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	90.125
11	29.00	28.75	28.35	29.00	28.00	99.125	99.125	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.875
12	29.00	28.75	28.35	29.00	28.00	99.00	99.00	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.625
13	29.00	28.75	28.35	29.00	28.00	....	....	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	....
15	29.00	28.75	28.35	29.00	28.00	98.875	98.875	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.625
16	29.00	28.75	28.35	29.00	28.50	99.00	99.00	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.625
17	29.00	28.75	28.35	29.00	28.50	98.875	98.875	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.875
18	29.00	28.75	28.35	29.00	28.50	99.00	99.00	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.875
19	29.00	28.875	28.475	29.00	28.75	99.00	99.00	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.875
20	29.00	28.875	28.475	29.00	28.75	....	....	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	....
22	29.00	29.00	28.60	29.00	28.75	98.875	98.875	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.875
23	29.00	29.00	28.60	29.00	28.75	99.00	99.00	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.875
24	29.00	29.00	28.60	29.00	28.75	99.125	99.125	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.875
26	29.00	29.00	28.60	29.00	28.75	99.125	99.125	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.875
27	29.00	29.00	28.60	29.00	27.75	....	....	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	....
29	29.00	29.00	28.60	29.00	28.75	98.75	98.75	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.875
30	29.00	29.00	28.60	29.00	28.75	98.50	98.50	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.875
31	29.00	29.00	28.60	29.00	28.75	98.25	98.25	13.00	12.80	11.50	12.00	11.75	12.50	12.75	26.80	29.00	89.875
AV.	**29.00**	**28.846**	**28.456**	**29.00**	**28.394**	**98.989**	**98.96**	**13.00**	**12.80**	**11.50**	**12.00**	**11.75**	**12.50**	**12.75**	**26.80**	**29.00**	**89.932**
HI.	**29.00**	**29.00**	**28.60**	**29.00**	**28.75**	**99.25**	**99.125**	**13.00**	**12.80**	**11.50**	**12.00**	**11.75**	**12.50**	**12.75**	**26.80**	**29.00**	**90.125**
LO.	**29.00**	**28.50**	**28.10**	**29.00**	**28.00**	**98.25**	**98.25**	**13.00**	**12.80**	**11.50**	**12.00**	**11.75**	**12.50**	**12.75**	**26.80**	**29.00**	**89.625**

* When split quotations prevail the daily average price is listed. The highs and lows for the month take into consideration the levels reached at both sides of such ranges.

United States Duties on Principal Ore and Metal Imports

(Including Revisions in Effect June 30, 1957, Under Geneva Agreements)

(Quantities Are in Pounds Unless Otherwise Stated; n.s.p.f. Stands for "Not Specially Provided For.")

COPPER

NOTE — The excise tax of 4c a pound on copper (which was reduced to 2c a pound by the Geneva Trade Agreement) was suspended in April, 1947, until March 31, 1949, and on expiration it was further suspended until June 30, 1950. The tax was reimposed on July 1, 1950. It was suspended again on May 22, 1951, retroactive to April 1, 1951, and until February 15, 1953, and again until June 30, 1954. Suspension further extended to June 30, 1955, and again until June 30, 1958. If import tax is restored, the 1956 Geneva Agreement provides for 5% reductions effective on June 30 of 1956, 1957 and 1958, provided the price is above 24c; if the price is below 24c the 2c tax would prevail.

Copper ore and concentrates, usable as flux, etc., copper content	1.70c lb.
Copper ore and concentrates, product of Cuba, copper content	free
Copper ore and concentrates, product of Philippines, copper content	00.85c lb.
Copper ore and concentrates, copper content	1.70c lb.
Regulus, black, or coarse copper, and cement copper, copper content	1.70c lb.
Unrefined black, blister, and converter copper in pigs or converter bars, copper content	1.70c lb.
Refined copper in ingots, plates or bars, copper content	1.70c lb.
Copper rolls, rods or sheets	1¼c lb. (plus 1.70c lb. ††)
Copper seamless tubes and tubing	2½c lb. (plus 1.70c lb. ††)
Copper plain wire	1½c lb. (plus 1.70c lb. ††)
Copper brazed tubes†	4.50c lb. (plus 1.70c lb. ††)
Old and scrap copper, fit only for remanufacture: and scale and clippings, copper content	1.70c lb.

†† Copper content.

BRASS

Brass rods, sheets, plates, bars, strips, Muntz or yellow metal sheets, sheathing, bolts, piston rods, shafting and bronze rods, tubes and sheets	2c lb.
Brass tubes and tubing, seamless	2c lb.
Brass tubes, brazed, angles and channels	6c lb.
Brass and bronze wire	12½%

LEAD

NOTE — Import duties on lead-bearing ores, flue dust, and mattes of all kinds, lead bullion or base bullion, lead in pigs and bars, lead dross, reclaimed lead and antimonial lead were suspended February 12, 1952, and reimposed on June 26, 1952. Lead scrap duty was reimposed July 1, 1952.

Lead-bearing ores and mattes, n. s. p. f., lead content	¾c lb.
Bullion or base bullion, lead content	1 1/16c lb.
Pigs and bars, lead content	1 1/16c lb.
Reclaimed, scrap, dross, lead content	1 1/16c lb.
Babbitt metal and solder, lead content	1 1/16c lb.
Pipe, sheets, shot, glaziers' lead, and wire	1 5/16c lb.
Type metal and antimonial lead, lead content	1 1/16c lb.
White lead	1.05c lb.
Litharge	1¼c lb.
Red lead	15/16c lb.
Orange mineral	1c lb.

ZINC

NOTE — Import duties on zinc-bearing ores, and on zinc in blocks, pigs and slabs were suspended February 12, 1952, and reimposed on July 24, 1952. Tax on old zinc and dross and skimmings reimposed July 1, 1953.

Zinc-bearing ores, except pyrites containing not more than 3% zinc, zinc content	6/10c lb.
Zinc contained in zinc-bearing ores, n. e. s., not recoverable, zinc content	6/10c lb.
Zinc, old and worn out, fit only for remanufacture	¾c lb.
Dross and skimmings	¾c lb.
Zinc in blocks, pigs or slabs	7/10c lb.
Zinc in sheets	1c lb.
Zinc sheets, plated with nickel or other base metal, or solutions	1⅛c lb.
Zinc dust	7/10c lb.
Zinc die-casting alloys	12½%
Zinc oxide and leaded zinc oxides containing not more than 25% lead, dry	3/5c lb.
ground in or mixed with oil or water	1c lb.

MISCELLANEOUS METALS AND ORES

Aluminum, metal and alloys, crude, except alloys elsewhere provided for†	1.25c lb.
Aluminum scrap	free
Aluminum plates, sheets, bars, rods, circles, squares, etc.†	2.50c lb.
Antimony ore, antimony content	free
Antimony metal and regulus	2c lb
Antimony needle or liquidated	¼c lb
Antimony oxide	1c lb
Antimony sulphides	½c lb. & 12½%
Arsenic, metallic†	2.50c lb.
Arsenious acid or white arsenic	free
Bauxite, crude*	free
Bauxite, refined**	¼c lb
Bismuth	1⅞%
Bismuth salts and compounds	35%
Beryllium metal†	21%
Beryllium ore	free
Cadmium	3¾c lb.
Cadmium flue dust, cadmium content	free
Chrome ore or chromite	free
Chrome or chromium metal†	10½%
Cobalt metal	free
Cobalt ore and concentrates, cobalt content	free
Magnesium, metallic†	50%
Magnesium powder, sheets, wire†	17c lb. & 8½%
Magnesium alloys	20c lb. & 10%
Magnesium scrap	free
Manganese ores, containing over 10% manganese, manganese content	¼c lb., except Cuba, free
Molybdenum ore or concentrates, molybdenum content†	30c lb.
Nickel ore, matte and oxide	free
Nickel and alloys, nickel chief value, n. s. p. f., in pigs, ingots, shot, cubes, grains, cathodes, or similar forms	1¼c lb.
Nickel, bars, rods, plates, sheets, castings, strips, wire or electrodes	12½%
Nickel scrap	free
Nickel tubes, tubing (if cold rolled, drawn or worked — 2½% extra)	6¼%
Platinum, grain, nuggets, sponge and scrap, oz. troy	free
Platinum in ingots, bars, sheets, or plates, not less than ⅛ in. thick, oz. troy	free
Platinum, ores, platinum content, oz. troy	free
Quicksilver or mercury	25c lb.
Selenium and salts	free
Tantalum	12½%
Tin ore, cassiterite, and black oxide of tin, tin content	free
Tin in bars, blocks, pigs, grain, granulated, and scrap, and alloys, chief value tin, n. s. p. f.	free
Tungsten ore or concentrates, tungsten content	50c lb.

*Crude bauxite import duty suspended through July 15, 1960. **Under Public Law 25 alumina imported for use in aluminum production is free for entries from July 17, 1956 through July 15, 1960. †Tariff reduced 5% on June 30, 1958, under Geneva Agreement which expires on June 30, 1959.

Copper Statistics Reported by Copper Institute

Combined Totals in U. S. A. and Outside U. S. A.

(In tons of 2,000 pounds)

	Crude Production		Refined	Deliveries to	Refined Stock	Stock Increases or Decreases		
	Primary	Secondary	Production	Customers	End of Period	Blister	Refined	Total
1957								
November	253,717	8,939	259,052	255,133	426,801	+ 3,604	— 1,231	+ 2,373
December	245,183	9,238	264,272	218,347	458,340	— 9,851	+31,539	+21,688
Total	2,897,719	123,270	3,035,588	2,853,307	458,340	—14,599	+103,920	+89,321
1958								
January	251,064	14,317	261,853	259,878	448,900	+ 3,528	— 9,440	— 5,912
February	230,716	6,506	247,562	224,709	469,747	—10,340	+20,847	+10,507
March	247,942	8,972	259,157	229,941	493,326	— 2,243	+23,579	+21,336
April	215,461	11,946	226,895	210,412	501,166	+ 512	+ 7,840	+ 8,352
May	218,387	11,190	225,771	212,993	498,516	+ 3,806	— 2,650	+ 1,156
June	214,283	11,414	228,387	240,825	476,823	— 2,540	—21,963	—24,233
July	216,315	9,516	229,578	220,801	475,164	— 3,747	— 1,659	— 5,406
August	224,673	9,474	217,914	247,116	436,476	+16,233	—38,688	—22,455
September	202,719	7,960	204,006	254,667	374,180	+ 6,673	—60,948	—54,275
October	204,938	20,613	192,199	292,630	269,654	+33,352	+105,126	—71,774
November	227,916	17,755	230,109	261,097	236,774	+15,562	—32,880	—17,318
December	253,499	8,694	282,191	260,841	258,874	+19,988	+22,100	+ 2,102
Total	2,707,913	138,507	2,805,622	2,916,588	258,874	—40,798	—199,466	—158,668

In U. S. A.

1957								
October	93,078	9,029	129,832	114,032	166,976	.....	— 9,837	.....
November	90,045	8,312	129,051	107,549	161,552	.....	— 5,424	.....
December	95,285	8,613	136,135	84,446	181,024	.....	+19,472	.....
Total	1,116,380	112,060	1,616,964	1,277,946	181,024	.....	+60,379	.....
1958								
January	94,735	13,855	136,748	110,557	176,287	.....	— 4,737	.....
February	87,130	6,222	128,299	93,784	201,223	.....	+24,936	.....
March	90,366	8,607	130,075	78,683	238,641	.....	+37,418	.....
April	86,123	11,475	120,467	81,930	251,099	.....	+12,458	.....
May	80,628	10,488	115,978	78,631	253,463	.....	+ 2,364	.....
June	71,092	10,980	107,918	100,796	244,450	.....	— 8,013	.....
July	64,444	8,858	110,130	77,523	242,781	.....	— 2,669	.....
August	67,917	8,999	100,640	86,982	215,560	.....	—27,221	.....
September	79,541	7,259	107,971	101,971	178,222	.....	—37,338	.....
October	92,214	19,865	113,288	120,793	128,490	.....	—49,732	.....
November	96,369	16,755	128,048	131,188	93,596	.....	—34,894	.....
December	97,618	7,722	146,978	116,310	80,722	.....	—12,874	.....
Total	1,008,147	131,105	1,446,540	1,179,416	80,722	.....	—100,302	.....

Outside U. S. A.*

1957								
Oct.	161,767	697	137,106	132,046	261,056	.....	+18,940	.....
Nov.	163,672	627	130,001	147,591	265,249	.....	+ 4,193	.....
December	149,898	625	128,137	133,901	277,316	.....	+12,067	.....
Total	1,783,119	11,210	1,418,624	1,575,361	277,316	.....	+43,541	.....
1958								
January	156,329	462	125,105	149,321	272,613	.....	— 4,703	.....
February	143,586	284	119,263	130,925	268,524	.....	— 4,089	.....
March	157,606	365	129,082	151,258	254,685	.....	—13,839	.....
April	129,338	471	106,428	128,482	250,067	.....	— 4,618	.....
May	137,759	702	109,793	134,302	245,053	.....	— 5,014	.....
June	143,191	584	120,469	140,029	231,373	.....	—13,680	.....
July	151,871	658	119,448	143,278	232,383	.....	+ 1,010	.....
August	156,756	475	117,274	160,134	220,916	.....	—11,467	.....
September	123,178	701	96,035	153,633	196,558	.....	—23,610	.....
October	112,724	748	78,911	171,827	141,164	.....	—55,394	.....
November	131,334	980	102,061	129,909	143,178	.....	+ 2,014	.....
December	155,881	972	135,213	144,531	178,152	.....	+34,974	.....
Total	1,699,766	7,402	1,359,082	1,737,172	178,152	.....	—99,164	.....

* Excluding Russia, Yugoslavia, Norway, Sweden, Japan and Australia.

Electrolytic Copper

Producers' Price, Del. Valley
Monthly Average Prices
(Cents Per Pound)

	1955	1956	1957	1958
Jan.	30.24	43.00	36.00	25.69
Feb.	33.00	44.03	33.318	25.00
Mar.	33.222	46.00	32.00	25.00
Apr.	36.00	46.00	32.00	25.00
May	36.00	46.00	32.00	25.00
June	36.00	46.00	30.955	25.36
July	36.00	41.56	29.25	26.125
Aug.	37.81	40.00	28.639	26.50
Sept.	43.00	40.00	27.031	26.50
Oct.	43.00	39.308	27.00	27.548
Nov.	43.00	36.00	27.00	29.00
Dec.	43.00	36.00	27.00	29.00
Aver.	37.522	41.992	30.183	26.31

Electrolytic Copper

Custom Smelters' Price, Del. Valley
Monthly Average Prices
(Cents Per Pound)

	1955	1956	1957	1958
Jan.	30.48	50.22	34.87	24.577
Feb.	33.00	52.07	32.273	23.557
Mar.	33.667	53.11	30.952	23.326
Apr.	36.00	48.88	31.24	23.66
May	36.00	44.221	30.163	23.865
June	36.00	40.00	29.60	25.52
July	36.00	38.14	28.39	26.231
Aug.	40.14	39.32	27.862	26.52
Sept.	50.00	39.00	25.948	26.355
Oct.	45.99	37.192	25.722	28.577
Nov.	45.84	35.96	25.435	29.829
Dec.	49.42	35.45	25.26	28.846
Aver.	39.38	42.797	28.93	25.905

Lake Copper

Producers' Price Delivered
Monthly Average Prices
(Cents Per Pound)

	1955	1956	1957	1958
Jan.	30.12	43.00	36.00	25.69
Feb.	33.00	43.783	33.182	25.00
Mar.	33.56	46.00	32.00	25.00
Apr.	36.00	46.00	32.00	25.00
May	36.00	46.00	32.00	25.00
June	36.00	46.00	30.955	25.00
July	36.00	41.68	29.25	25.75
Aug.	37.46	40.00	28.611	26.50
Sept.	43.00	40.00	27.00	26.50
Oct.	43.00	39.321	27.00	27.577
Nov.	43.00	36.00	27.00	29.00
Dec.	43.00	36.00	27.00	29.00
Aver.	37.51	41.975	30.162	26.251

Fabricators' Copper Statistics

(In tons of 2,000 pounds)

	Fabricators' Stocks of Refined Cop.	Unfilled Purchases of Refined by Fab. from Producers	Fabricators' Working Stocks	Unfilled Sales by Fabricators to Customers	Actual Copper Consmd. by Fabricators	Excess Fabricators' Stocks Over Orders Bkd.
1952						
Total	331,499	32,652	292,157	275,608	1,391,477	—203,614
1953						
Total	380,881	25,022	309,664	170,917	1,375,869	— 74,678
1954						
Total	360,526	58,125	304,619	136,581	1,231,840	— 22,549
1955						
Total	.....	.....	.....	.....	1,418,241	.....
1956						
May	435,083	131,023	318,592	249,352	124,727	— 1,838
June	451,126	114,223	324,970	227,097	113,835	+ 13,282
July	465,015	109,040	334,584	220,810	81,275	+ 18,661
Aug.	457,679	115,295	338,818	221,975	117,427	+ 12,181
Sept.	445,679	114,981	338,488	204,154	115,867	+ 18,018
Oct.	440,706	112,893	336,856	198,517	119,440	+ 18,226
Nov.	435,216	110,792	335,829	178,814	119,441	+ 31,365
Dec.	437,187	117,601	336,217	183,834	99,223	+ 34,737
Total	.....	.....	.....	.....	1,416,378	.....
1957						
Jan.	435,635	107,231	335,944	178,326	119,517	+ 28,596
Feb.	422,266	110,174	334,542	178,913	114,298	+ 18,985
Mar.	429,410	104,551	338,454	164,623	106,170	+ 30,884
Apr.	429,708	98,638	335,921	164,410	117,041	+ 28,015
May	434,852	92,943	336,697	170,476	115,355	+ 20,622
June	426,905	82,919	340,743	153,042	110,527	+ 16,039
July	432,918	85,728	341,684	144,410	77,991	+ 32,552
Aug.	429,627	82,768	344,315	144,375	110,323	+ 23,826
Sept.	425,168	80,436	344,530	144,538	106,927	+ 16,536
Oct.	420,130	80,774	341,869	138,420	119,161	+ 20,615
Nov.	428,520	68,249	345,832	128,719	98,725	+ 22,218
Dec.	430,171	75,627	347,465	138,631	83,067	+ 19,702
Total	.....	.....	.....	.....	1,279,086	.....
1958						
Jan.	445,514	57,917	348,426	123,756	94,642	+ 31,249
Feb.	452,673	52,342	351,035	128,330	86,625	+ 25,650
Mar.	448,125	71,693	346,875	141,387	83,694	+ 31,556
Apr.	450,442	76,602	347,607	145,623	79,613	+ 33,814
May	441,001	78,194	346,404	138,190	88,447	+ 34,601
June	433,526	72,383	330,301	145,162	109,011	+ 30,448
July	431,796	77,362	326,263	153,529	79,353	+ 29,366
Aug.	421,931	78,194	323,667	150,436	96,717	+ 26,022
Sept.	416,887	71,025	319,281	145,390	105,474	+ 28,941
Oct.	399,113	91,019	315,929	156,692	138,017	+ 17,511
Nov.	419,914	88,580	328,238	157,799	110,487	+ 22,457

Scrap Copper Receipts by Custom Smelters and Refineries in United States*

(In Short Tons)

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
Jan.	17,084	15,763	6,640	4,528	6,486	9,859	11,047	14,322	17,506	16,024
Feb.	20,238	12,500	5,153	3,633	10,337	8,490	15,198	14,497	11,145	9,518
Mar.	20,678	13,538	7,912	5,243	19,991	9,738	12,198	15,921	13,934	11,783
Apr.	15,968	12,304	8,553	6,214	16,583	9,004	13,162	17,233	14,288	15,279
May	14,237	8,749	8,458	8,033	10,857	8,687	15,133	20,805	12,397	13,989
June	8,809	20,523	8,628	4,425	10,945	13,309	14,765	14,758	11,949	13,945
July	7,782	10,040	6,642	5,188	9,063	10,260	9,988	12,632	8,926	12,185
Aug.	8,246	10,452	6,113	5,003	7,137	10,100	12,197	12 510	11,645	11,896
Sept.	10.980	4,903	3,561	4,667	9,042	10,641	15,037	9,518	9,756	9,268
Oct.	6,401	9,459	3,336	4,602	10,065	11,662	12,897	15,570	13,151	23,088
Nov.	15,347	9,237	3,179	4,724	7,815	10,879	9,865	11,369	11,146	16,425
Dec.	10,533	7,178	4,538	6,208	11,476	14,876	13,180	14,613	11,237	10,796
Total	156,303	142,067	71,812	62,470	129,798	127,449	154,714	173,748	147,080	164,196

* As compiled by Copper Institute.

Brass and Bronze Ingot Monthly Shipments

(NET TONS)

The following figures showing the combined shipments of ingot brass and bronze are compiled by the Ingot Brass and Bronze Industry and represent in excess of 95 per cent of the deliveries of the entire industry.

	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958
Jan.	26,998	19,456	18,874	28,416	28,315	23,423	20,661	25,201	27,736	25,681	20,468
Feb.	22,487	15,026	18,487	27,168	24,211	25,429	19,920	25,349	24,949	20,769	17,413
Mar.	24,282	14,550	22,494	31,997	23,890	28,256	23,653	29,713	28,310	21,948	18,825
Apr.	25,177	10,695	22,118	30,472	22,547	25,044	24,746	27,641	25,808	23,507	18,009
May	23,716	11,114	23,643	33,267	21,740	21,660	22,269	23,708	23,437	22,037	17,191
June	24,401	9,696	25,093	33,817	21,274	20,818	22,348	23,141	18,842	18,888	17,962
July	20,456	10,220	21,609	32,016	18,947	19,321	17,074	18,513	17,364	16,695	16,658
Aug.	24,098	14,194	29,689	25,285	21,807	20,156	21,684	27,013	23,812	19,654	17,882
Sept.	23,641	16,208	28,811	22,285	22,770	21,463	22,464	26,349	20,929	19,670	20,540
Oct.	21,559	18,026	32,240	23,124	25,811	22,280	24,080	25,228	23,045	22,800	23,225
Nov.	21,731	18,488	31,748	23,544	23,441	21,806	23,061	25,102	21,818	19,767	20,758
Dec.	20,954	17,950	28,575	20,987	22,983	20,541	21,274	21,448	18,046	16,875	18,676
Total	279,500	175,643	303,563	332,378	277,736	271,251	263,233	298,406	274,096	248,297	227,607
Aver.	21,292	14,637	25,297	27,615	23,145	22,694	21,936	24,867	22,841	20,681	18,133

Mine Production of Copper in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern	Missouri	Western	Total
1955				
Ttl.	68,622	2,140	921,838	992,600
1956				
Ttl.	79,681	2,130	1,018,496	1,100,307
1957				
Apr.	6,579	237	86,627	94,443
May	7,198	200	85,876	93,274
June	7,793	129	82,398	90,320
July	6,101	154	78,502	84,757
Aug.	7,572	133	79,892	87,038
Sept.	6,083	132	79,623	85,338
Oct.	4,614	147	82,992	87,753
Nov.	7,063	70	80,848	87,981
Dec.	6,962	67	81,080	88,109
Ttl.	79,369	1,800	995,753	1,076,922
1958				
Jan.	7,615	164	82,476	90,255
Feb.	6,826	125	74,766	81,717
Mar.	7,517	123	79,594	87,234
April	7,035	161	76,911	84,107
May	6,522	152	71,717	78,391
June	5,801	155	62,296	68,252
July	4,188	132	56,672	61,222
Aug.	5,570	127	61,342	67,039
Sept.	5,312	114	77,561	82,987
Oct.	7,002	...	84,516	91,518

Average Custom Smelters' Scrap Buying Prices

(Cents per pound for carload lots del. consumers' works)

	No. 1 Copper Scrap	No. 2 Copper Scrap	Light Copper Scrap	Refinery Brass*
1957				
Oct.	21.28	19.78	17.53	19.00
Nov.	21.293	19.793	17.543	19.10
Dec.	20.78	19.28	17.03	18.58
Av.	24.38	22.88	20.76	22.11
1958				
Jan.	19.44	17.94	15.69	17.70
Feb.	18.955	17.455	15.205	16.932
Mar.	19.21	17.71	15.46	16.92
Apr.	19.60	18.10	15.85	17.56
May	20.02	18.52	16.27	17.894
June	21.93	20.43	18.18	19.76
July	22.52	21.02	18.77	20.26
Aug.	22.62	21.12	18.87	20.12
Sept.	22.37	20.87	18.62	19.87
Oct.	24.80	23.30	21.05	22.30
Nov.	25.597	24.097	21.847	23.097
Dec.	24.356	22.856	20.606	21.856
Aver	21.788	20.282	18.035	18.047

*Of dry content for material having a dry copper content in excess of 60%.

Brass Ingot Makers' Scrap Copper Buying Prices

(Average Prices)

(Cents per pound del. refinery for 60,000 lbs. of each grade)

	No. 1 Copper Scrap	No. 2 Copper Scrap	No. 1 Composition	Heavy Yellow Brass
1957				
Oct.	21.28	19.78	19.067	13.24
Nov.	21.293	19.793	19.043	12.913
Dec.	20.78	19.28	18.94	12.94
Av.	24.37	22.87	21 804	15.66
1958				
Jan.	19.44	17.94	17.77	12.19
Feb.	18.955	17.455	17.06	11.341
Mar.	19.21	17.71	17.274	11 88
Apr.	19.60	18.10	17.75	12.35
May	19.923	18.423	18.038	12.769
June	21.93	20.43	19.02	13.43
July	22.52	21.02	19.24	13.53
Aug.	22.62	21.12	19.11	13.80
Sept.	22.37	20.87	18.88	12.90
Oct.	24.80	23.30	20.51	14.938
Nov.	25.597	24.097	20.182	14.125
Dec.	24.356	22.856	19.038	13.038
Aver.	21.777	20.277	18.653	13.024

Lead Statistics Reported by American Bureau of Metal Statistics

Lead Refineries in U. S. A. and Outside U. S. A.

(Recoverable Lead Content in Tons of 2,000 Pounds)

Combined U. S. A. and Outside U. S. A.

	REFINED PRODUCTION			DELIVERIES			STOCKS		
1958	Pig	Antimonial Lead Content	Total	Pig	Antimonial Lead Content	Total	Pig	Antimonial Lead Content	Total
Jan. ..	137,057	8,413	145,470	125,802	7,616	133,418	179,314	18,345	197,659
Feb. ..	129,553	7,889	137,442	87,857	7,736	95,593	213,084	18,497	231,581
Mar. ..	130,088	8,950	139,038	103,730	8,131	111,861	228,567	19,316	247,883
Apr. ..	122,690	8,192	130,882	100,352	7,668	108,020	243,586	19,840	263,426
May ..	135,618	8,918	144,536	109,209	8,540	117,749	266,326	20,218	286,544
June ..	127,982	7,484	135,466	105,121	8,493	113,614	285,482	19,209	304,691
July ..	109,964	8,233	118,197	107,801	9,252	117,053	284,650	18,190	302,840
Aug. ..	103,701	8,973	112,674	102,898	9,903	112,801	284,818	17,260	302,078
Sept. ..	116,283	8,806	125,089	121,929	7,986	129,915	279,172	18,080	297,252
Oct. ..	121,934	10,656	132,590	139,698	9,408	149,106	262,510	19,328	281,838
Nov. ..	120,951	8,971	129,922	112,495	9,381	121,876	273,033	18,918	291,951
U. S. A.									
1958									
Jan. ..	43,922	3,507	47,429	62,163	2,933	65,096	104,594	12,384	116,978
Feb. ..	43,475	3,462	46,937	33,151	4,107	37,258	121,468	12,753	134,221
Mar. ..	39,893	3,374	43,267	52,291	3,845	56,136	140,337	12,830	153,167
Apr. ..	37,328	3,384	40,712	40,597	3,373	43,970	156,150	13,202	169,352
May ..	42,659	4,481	47,140	45,576	4,118	49,694	182,187	13,892	196,079
June ..	40,795	3,600	44,395	45,640	4,409	50,049	193,021	13,298	206,319
July ..	36,052	2,681	38,733	47,381	5,263	52,644	200,949	11,027	211,976
Aug. ..	34,275	4,890	39,165	50,145	4,956	55,101	201,759	11,150	212,909
Sept. ..	38,508	4,525	43,033	65,301	4,516	69,817	215,389	11,991	227,380
Oct. ..	40,225	5,153	45,378	70,580	4,455	75,035	207,335	12,728	220,063
Nov. ..	36,572	3,621	40,193	44,834	4,181	49,019	217,728	12,352	230,080
Outside U. S. A.									
1958									
Jan. ..	93,135	4,906	98,041	63,639	4,683	68,322	74,720	5,961	80,681
Feb. ..	86,078	4,427	90,505	54,706	3,629	58,335	91,616	5,744	97,460
Mar. ..	90,195	5,576	95,771	51,439	4,286	55,725	88,230	6,486	94,716
Apr. ..	85,362	4,808	90,170	59,755	4,295	64,050	87,436	6,638	94,074
May ..	92,959	4,437	97,396	63,633	4,422	68,055	84,139	6,326	90,465
June ..	87,187	3,884	91,071	59,481	4,084	63,565	92,461	5,911	98,372
July ..	73,912	5,552	79,464	60,420	3,989	64,409	83,701	7,163	90,864
Aug. ..	69,426	4,083	73,509	52,753	4,947	57,700	83,059	6,110	89,169
Sept. ..	77,775	4,281	82,056	56,628	3,470	60,098	63,783	6,089	69,872
Oct. ..	81,709	5,503	87,212	69,118	4,953	74,071	55,175	6,600	61,775
Nov. ..	84,379	5,350	89,729	67,661	5,200	72,861	55,305	6,566	61,871

Summary of Lead Statistics for United States

Recoverable Lead Content in Tons of 2000 Pounds	Raw Material at Smelter	Stocks (end of period) — Base Bullion — At Smelter & Transit	Stocks (end of period) — Base Bullion — At Refinery and Process	Refined Pig and Antimonial	Total	Smelter Receipts — Primary Origin — U.S.A.	Smelter Receipts — Primary Origin — Outside U.S.A.	Smelter Receipts — Scrap	Smelter Receipts — Total
Year 1954	59,563	4,781	42,276	101,092	207,712	351,507	157,041	44,801	553,349
Year 1955	68,894	6,054	41,867	35,889	152,704	365,582	172,545	38,314	576,441
Year 1956	73,426	5,841	34,319	45,486	159,072	388,567	192,948	46,531	628,046
Year 1957	75,962	6,247	30,705	103,308	216,222	368,240	210,924	36,358	615,522
1958									
January	76,823	6,342	33,381	116,978	233,524	26,727	22,065	3,307	52,099
February	76,739	4,264	31,876	134,221	247,100	24,888	16,605	1,938	43,431
March	80,664	5,493	29,152	153,167	268,476	23,647	19,735	2,368	45,750
April	83,496	5,359	29,141	169,352	287,348	25,668	16,738	1,952	44,358
May	76,981	5,785	27,472	196,079	306,317	28,637	10,445	1,971	41,053
June	77,858	4,420	28,254	206,319	316,851	30,230	14,022	1,315	45,567
July	81,103	4,848	30,065	211,976	327,992	23,440	19,665	1,629	44,734
August	78,261	6,461	33,863	212,909	331,494	26,427	13,145	1,282	40,854
September	74,100	5,893	32,606	227,380	339,979	24,718	14,937	1,718	41,373
October	63,630	6,401	29,833	220,063	319,927	22,405	9,205	3,713	35,323
November	64,821	4,721	30,208	230,080	329,830	26,179	15,932	3,954	46,065

	Smelter Production	Refined Productions — Pig	Refined Productions — Antimonial	Refined Productions — Total	Deliveries to U. S. Fabricators including imports from sources reporting to ABMS — Pig	Deliveries to U. S. Fabricators including imports from sources reporting to ABMS — Antimonial	Deliveries to U. S. Fabricators including imports from sources reporting to ABMS — Total
Year 1954	547,822	491,765	56,349	548,114	638,672	61,799	700,471
Year 1955	549,911	485,883	60,488	546,371	696,086	77,874	773,960
Year 1956	599,777	548,486	61,359	609,845	640,897	69,679	710,576
Year 1957	596,368	539,613	61,286	600,899	621,350	54,336	686,686
1958							
January	50,451	43,922	3,507	47,429	62,163	2,933	65,096
February	42,875	43,475	3,462	46,937	33,151	4,107	37,258
March	40,971	39,893	3,374	43,267	52,291	3,845	56,136
April	40,499	37,328	3,384	40,712	40,597	3,373	43,970
May	46,653	42,659	4,481	47,140	45,576	4,118	49,694
June	43,662	40,795	3,600	44,395	45,640	4,409	50,049
July	40,328	36,052	2,681	38,733	47,381	5,263	52,644
August	42,766	34,275	4,890	39,165	50,145	4,956	55,101
September	44,595	38,508	4,525	43,033	65,301	4,516	69,817
October	45,144	40,225	5,153	45,378	70,580	4,455	75,035
November	44,163	36,572	3,621	40,193	44,834	4,181	49,015

United States Lead Statistics of Primary Refineries

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

	Stock At Beginning	Production Primary & Secondary	Total Supply	Stock At End	Domestic Shipments
1953	43,560	533,883	577,443	81,152	488,437
1954	81,152	551,618	632,770	92,719	475,551
1955	28,855	547,153	639,872	31,089	531,339
1956					
Total	....	613,293	644,382	....	529,484
1957					
February	42,905	48,102	90,917	48,699	37,517
March	48,699	52,357	101,056	46,184	38,225
April	46,184	56,170	102,354	57,444	37,583
May	57,444	51,718	109,162	58,085	35,334
June	58,085	48,203	106,288	64,861	37,257
July	64,861	47,100	111,961	68,009	38,582
August	68,009	48,191	116,200	60,633	49,406
September	60,633	50,436	111,069	54,682	51,859
October	54,682	52,041	106,723	59,041	40,447
November	59,041	48,771	107,812	70,874	32,193
December	70,874	50,500	121,374	91,598	24,108
Total	....	604,353	645,534	....	463,060
1958					
January	91,598	47,665	139,263	101,206	33,422
February	101,206	47,133	148,339	119,522	23,832
March	119,522	43,441	162,963	128,754	28,885
April	128,754	40,984	169,738	143,136	22,172
May	143,136	47,487	190,623	155,121	30,021
June	155,121	44,636	199,757	163,504	32,078
July	163,504	38,827	202,331	164,860	31,948
August	164,860	39,520	204,380	169,302	34,254
September	169,302	43,269	212,571	170,666	41,657
October	170,666	45,467	216,133	169,435	46,647
November	169,435	40,485	209,920	179,321	30,591

In instances where the figures are not in balance it is due to shipments to other than domestic consumers.

Industrial Classification of Domestic Lead Shipments

(American Bureau of Metal Statistics) (In tons of 2,000 lbs.)

	Cable	Amm.	Foil	Batt'y	Brass Making	Sundries	Jobbers	Unclassified
1954	75,412	30,246	2,811	66,088	5,192	57,369	9,170	229,264
1955								
Total	72,418	27,599	2,622	88,461	3,960	52,994	13,034	270,251
1956								
May	6,490	2,825	...	5,027	131	3,513	964	21,753
June	8,502	2,150	...	4,167	186	3,645	1,021	21,787
July	3,497	904	...	5,007	80	2,859	1,453	22,683
Aug.	7,712	1,497	85	6,334	713	4,443	1,262	26,358
Sept.	6,354	1,850	135	6,303	230	5,038	1,339	26,270
Oct.	7,988	1,715	135	7,108	286	4,955	1,493	21,574
Nov.	6,096	2,351	....	8.556	226	5.573	792	23,755
Dec.	6,440	1,449	85	5,832	160	7,258	394	22,573
Total	80,360	24,501	1,435	70,614	3,158	56,851	13,213	274,716
1957								
Jan.	5,297	2,800	200	6,886	671	4,002	1,191	19,502
Feb.	5,103	1,450	350	6,549	508	4,820	625	18,112
Mar.	5,956	752	...	6,479	686	4,614	1,064	18,674
April	6,731	2,250	....	6,242	909	2,958	1,040	17,453
May	6,976	2,200	120	4,705	270	3,871	634	16,558
June	3,726	2,250	75	3,762	666	5,071	1,087	20,620
July	5,249	1,650	105	5,332	566	5,310	1,110	19,260
Aug.	5,406	2,250	220	6,165	650	6,246	1,403	27,066
Sept.	4,880	2,700	295	6,722	850	5,782	891	29,739
Oct.	3,671	3,300	205	5,973	881	4,203	847	21,367
Nov.	2,950	2,500	85	3,126	493	3,800	706	18,533
Dec.	2,499	1,350	36	2,820	270	2,607	529	13,997
Total	58,444	25,452	1,691	64,761	7,420	53,284	11,127	240,881
1958								
Jan.	2,938	550	70	4,775	521	5,173	801	18,594
Feb.	2,899	1,750	70	5,124	90	1,643	888	11,368
Mar.	3,133	1,200	35	4,711	681	3,149	908	15,068
April	3,207	900	70	3,138	580	2,831	533	10,913
May	3,216	1,850	35	4,671	866	3,071	1,027	15,285
June	3,463	1,950	35	2,767	480	4,217	1,716	17,450
July	3,169	1,250	275	3,936	515	4,157	1,052	17,594
Aug.	3,481	2,415	70	4,992	400	6,399	100	16,397
Sept.	4,132	2,290	320	5,775	848	6,771	1,747	19,774
Oct.	3,243	2,450	...	4,548	285	6,210	1,641	28,270
Nov.	3,690	2,150	50	6,527	360	4,887	822	12,105

Lead Prices at New York

(Common Grade)
Monthly Average Prices
(Cents per pound)

	1955	1956	1957	1958
Jan.	15.00	16.16	16.00	13.00
Feb.	15.00	16.00	16.00	13.00
Mar.	15.00	16.00	16.00	13.00
Apr.	15.00	16.00	16.00	12.00
May	15.00	16.00	15.385	11.712
June	15.00	16.00	14.32	11.24
July	15.00	16.00	14.00	11.00
Aug.	15.00	16.00	14.00	10.85
Sept.	15.12	16.00	14.00	10.89
Oct.	15.50	16.00	13.704	12.673
Nov.	15.50	16.00	13.50	13.00
Dec.	15.56	16.00	13.00	13.00
Aver.	15.14	16.013	14.66	12.114

Lead Sheet Prices

(To Jobbers, Full Sheets)
Monthly Average Prices
(Cents per pound)

	1955	1956	1957	1958
Jan.	20.00	21.66	21.50	18.50
Feb.	20.00	21.50	21.50	18.50
Mar.	20.00	21.50	21.50	18.50
Apr.	20.00	21.50	21.50	17.50
May	20.00	21.50	20.885	17.212
June	20.00	21.50	19.82	16.74
July	20.00	21.50	19.82	16.50
Aug.	20.00	21.50	19.50	16.35
Sept.	20.12	21.50	19.50	16.39
Oct.	20.50	21.50	19.204	18.173
Nov.	20.50	21.50	19.00	18.50
Dec.	20.56	21.50	18.50	18.50

Battery Shipments

The following table shows replacement battery shipments in the United States as compiled by the Business Information Division of Dun & Bradstreet, Inc., for the Association of American Battery Manufacturers:

(In thousands of units)

	1955	1956	1957	1958
Jan.	1,518	2,058	2,638	2,004
Feb.	1,691	1.340	1,961	1,803
Mar.	1,356	1,348	1,254	1,577
Apr.	1,315	1,368	1,178	1,242
May	1,614	1,761	1,605	1,454
June	1,842	1,807	1,878	1,773
July	2,078	2,178	2,469	2,101
Aug.	2,852	2,571	2,856	2,333
Sept.	3,120	2,711	2,688	2,704
Oct.	3,120	3,015	3,042	2,976
Nov.	2,697	2,592	2,359	2,223
Dec.	2,625	2,265	2,015	....
Total	25,828	25,014	25,943	....

Lead Stocks at Primary U. S. Smelters and Refiners

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

	In ore and matte and in process at smelters	— In base bullion (lead content) — At smelters & refineries	In transit to refineries	In process at refineries	Refined pig lead	Antimonial lead	Total Stocks
1956							
Sept. 1	81,634	18,529	2,874	29,991	29,230	10,074	172,332
Oct. 1	77,787	15,991	4,413	28,083	29,361	11,181	166,816
Nov. 1	78,253	12,022	3,083	25,783	30,932	11,382	161,485
Dec. 1	82,197	9,095	4,132	25,627	25,360	11,832	158,243
1957							
Jan. 1	77,918	12,222	2,846	25,092	29,435	11,746	159,249
Feb. 1	80,451	10,636	4,061	25,827	32,418	10,487	163,880
Mar. 1	81,274	11,880	4,394	25,728	38,479	10,220	171,975
Apr. 1	82,461	14,598	3,593	25,401	36,390	9,794	172,237
May 1	81,061	17,035	2,705	20,890	48,053	9,391	179,135
June 1	81,364	11,585	3,071	21,002	48,286	9,799	175,107
July 1	82,730	12,036	3,560	22,380	55,358	9,503	185,567
Aug. 1	97,111	11,479	2,532	22,917	59,348	8,661	202,048
Sept. 1	84,205	13,029	2,667	22,439	51,080	9,553	182,973
Oct. 1	80,662	11,905	3,175	20,351	44,467	10,215	170,775
Nov. 1	76,230	14,220	2,538	18,695	47,460	11,581	170,724
Dec. 1	65,341	11,646	3,547	21,867	59,755	11,119	173,275
1958							
Jan. 1	79,362	11,019	2,779	23,154	79,741	11,857	207,912
Feb. 1	79,738	11,510	3,678	24,535	88,517	12,689	220,667
Mar. 1	79,588	9,546	3,670	22,834	107,213	12,309	235,250
April 1	83,185	10,692	2,187	21,766	116,610	12,144	246,584
May 1	86,053	11,838	2,138	20,524	130,668	12,468	263,689
June 1	79,482	11,059	2,010	20,188	141,967	13,154	267,860
July 1	80,060	9,012	1,570	22,092	150,648	12,856	276,238
Aug. 1	83,347	12,438	860	21,615	154,378	10,482	283,379
Sept. 1	80,561	15,496	1,176	20,444	158,413	10,889	286,979
Nov. 1	66,586	12,926	1,280	19,041	157,385	12,050	269,268
Dec. 1	67,675	11,102	2,683	20,941	167,493	11,828	281,722

Receipts of Lead in Ore and Scrap

By U. S. Smelters (a)

(American Bureau of Metal Statistics) (In tons of 2,000 lbs.)

	Receipts of lead in ore			Receipts of lead in scrap etc. (b)	Total receipts in ore, & scrap
	United States	Foreign	Total		
1952 Total	**405,990**	**98,276**	**504,266**	**41,845**	**546,111**
1953 Total	351,183	155,788	506,971	42,994	549,965
1954 Total	**336,291**	**158,081**	**494,372**	**49,864**	**544,236**
1955 Total	**341,595**	**172,966**	**514,561**	**42,996**	**557,557**
1956					
October	33,614	12,350	45,964	5,439	51,403
November	30,553	14,308	44,861	5,141	50,002
December	31,154	15,095	46,252	4,536	50,788
Total	368,499	192,318	560,817	55,925	616,792
1957					
January	30,632	19,961	50,593	4,471	55,064
February	31,410	15,059	46,469	4,564	51,033
March	33,445	18,813	52,258	3,058	55,316
April	31,343	13,042	44,385	2,848	47,233
May	32,138	12,324	44,462	3,431	47,893
June	29,896	19,592	49,488	2,272	51,760
July	29,585	17,936	47,521	2,893	50,414
August	29,225	18,774	47,999	3,190	51,189
September	26,479	13,757	40,236	4,375	44,611
October	29,342	13,782	43,124	4,386	47,510
November	25,809	17,251	43,060	3,258	46,318
December	27,105	26,610	53,715	3,791	57,506
Total	356,409	206,901	563,310	42,537	605,847
1958					
January	25,537	22,097	47,634	3,507	51,141
February	23,789	16,400	40,189	2,184	42,373
March	21,735	20,038	41,773	3,154	44,927
April	25,104	15,821	40,925	1,913	42,838
May	**27,427**	**10,228**	**37,655**	**1,867**	**39,522**
June	28,577	13,811	42,388	1,366	43,754
July	22,289	19,692	41,891	1,615	43,596
August	25,075	13,043	38,118	1,265	39,383
September	23,228	14,576	37,804	1,810	39,614
October	21,099	9,093	30,192	3,591	33,783
November	26,314	14,541	40,855	4,018	44,873

(a) Receipts of lead in ore are computed on the basis of recoverable lead. Owing to the estimational factor in this, which is probably on the low side, and also to the possibility that some lead receipts may escape attention, these monthly totals probably underrun the actual production of pig lead. (b) inclusive only of scrap smelted in connection with ore, plus some scrap received by primary refiners.

N. Y. Lead Price Changes

(Effective Date)

1950		July 23	14.00
May 11	12.00	Sept. 16	13.50
June 23	11.50	1954	
June 28	11.00	Jan. 18	13.00
July 12	11.50	Feb. 18	12.50
July 13	12.00	Mar. 9	12.75
Aug. 15	13.00	Mar. 10	13.00
Aug. 21	14.00	Mar. 26	13.25
Sept. 1	15.00	Mar. 29	13.50
Sept. 8	16.00	Apr. 1	13.75
Oct. 31	17.00	Apr. 12	14.00
1951		June 2	14.25
Oct. 2	**19.00	June 15	14.00
1952		Aug. 25	14.25
Apr. 29	18.00	Sept. 7	14.50
May 2	17.00	Sept. 15	14.75
May 12	15.00	Oct. 4	14.875
June 23	15.50	Oct. 5	15.00
June 24	16.00	1955	
Oct. 7	15.00	Sept. 23	15.00-15.50
Oct. 14	14.00	Sept. 26	15.50
Oct. 22	13.50	Dec. 29	16.00
Nov. 3	14.00	1956	
Nov. 10	14.25	Jan. 4	16.50
Nov. 11	14.50	Jan. 13	16.00
Nov. 20	14.25	1957	
Nov. 24	14.00	May 9	15.50
Dec. 22	14.25	May 16	15.00
Dec. 29	14.50	June 11	14.00
Dec. 31	14.75	Oct. 14	13.50
1953		Dec. 2	13.00
Jan. 7	14.50	1958	
Jan. 12	14.00	Apr. 1	12.00
Feb. 2	13.50	May 14	11.50
Mar. 4	13.00	June 3	11.00
Mar. 10	13.50	June 18	11.50
Apr. 7	13.00	July 1	11.00
Apr. 16	12.50	Aug. 13	10.75
Apr. 21	12.00	Sept. 17	11.00
Apr. 29	12.50	Sept. 30	11.50
May 18	12.75	Oct. 2	12.00
May 19	13.00	Oct. 8	12.50
May 26	13.15	Oct. 14	13.00
June 11	13.50	1959	
July 20	13.75	Jan. 21	12.00

**OPS Ceiling.

Antimonial Lead Stocks at Primary Refineries

(A.B.M.S.)
(In tons of 2,000 lbs.)

End of.	1955	1956	1957	1958
Jan.	14,902	8,389	10,487	12,689
Feb.	12,204	9,095	10,220	12,309
Mar.	12,385	10,289	9,794	12,144
Apr.	11,740	10,690	9,391	12,468
May	11,055	10,902	9,799	13,154
June	10,233	9,452	9,503	12,856
July	9,779	10,924	8,661	10,482
Aug.	7,252	10,074	9,553	10,889
Sept.	7,461	11,181	10,215	11,004
Oct.	8,085	11,382	11,581	12,050
Nov.	9,263	11,832	11,119	11,828
Dec.	9,893	11,746	11,857	....

Antimonial Lead Production by Primary Refineries

(A.B.M.S.)
(In tons of 2,000 lbs.)

End of.	1955	1956	1957	1958
Jan.	4,529	5,045	5,113	3,743
Feb.	4,777	5,888	5,468	3,657
Mar.	6,202	5,526	5,091	3,527
Apr.	5,343	5,818	6,183	3,655
May	4,737	5,405	6,978	4,827
June	4,792	4,456	4,466	3,992
July	1,153	3,853	5,372	2,775
Aug.	2,946	5,343	7,967	5,244
Sept.	6,650	6,709	7,574	4,761
Oct.	8,016	5,378	6,148	5,849
Nov.	7,985	6,993	3,791	3,913
Dec.	6,907	5,766	3,290	....
Total	64,037	66,180	67,541	....

Lead Imports and Exports By Principal Countries

(A. B. M. S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.

	1958 Aug.	Sept.	Oct.
IMPORTS			
U. S.† (s.t.)	23,945	40,822	...
Canada (s.t.)	101	...	...
Denmark	2,279	2,374	3,710
France	3,799	4,188	5,902
Italy‡	653	...	...
Netherlands	1,666	3,950	2,925
Norway	956	728	...
Sweden	1,147	852	...
Switzerland	1,399	971	1,615
U. K. (l.t.)	17,848	19,636	6,689
India* (l.t.)	1,341	1,452	...
EXPORTS			
U. S.† (s.t.)	132	242	...
Canada (s.t.)	7,231	5,125	10,320
Denmark	1,096	1,187	1,731
France	863	1,474	828
Netherlands	162	549	298
Sweden	1,572	2,899	...
Switzerland	6	...	30
Northern Rhodesia* (l.t.)	1,066	930	...

† Refined.
‡ Includes lead alloys.
* British Bureau of Non-Ferrous Metal Statistics.

French Lead Imports

(A.B.M.S.)

(In metric tons)

	1958 Sept.	Oct.	Nov.
Ore (gross weight)	4,773	8,229	8,584
Morocco	4,773	7,275	8,584
Fr. Eq. Africa	...	954	...
Pig lead	4,188	5,902	3,498
Algeria	52	4	22
Morocco	1,808	2,307	1,834
Tunisia	2,328	2,871	1,616
Australia	...	662	26
Other countries	...	58	...
Antimonial lead	8	3	31

U. K. Lead Imports

(British Bureau of Non-Ferous Metal Statistics)

(In tons of 2,240 lbs.)

	1958 Sept.	Oct.	Nov.
(Gross Weight)			
Lead and lead alloys	19,636	6,689	9,915
Australia	13,981	3,540	7,517
Canada	2,530	1,425	1,495
Belgium	1,050	316	400
Peru	150	...	...
Other countries	1,925	1,408	503

IT PAYS
to
ADVERTISE
in the
DAILY METAL REPORTER

U. S. Lead Consumption

Bureau of Mines — In Short Tons)

Metal Products	Jan.-Oct.	Sept.	Oct.
Ammunition	34,018	3,716	4,057
Bearing metals	15,197	1,772	1,681
Brass and bronze	15,852	1,759	2,177
Cable covering	62,472	6,515	6,482
Calking lead	56,721	5,620	7,843
Casting metals	6,535	651	860
Collapsible tubes	6,107	636	354
Foil	3,894	579	506
Pipes, traps and bends	18,259	2,504	2,100
Sheet laed	20,160	2,079	2,760
Solder	48,124	5,236	5,172
Storage battery grids, posts, etc.	125,219	15,175	14,201
Storage battery oxides	123,220	14,675	13,751
Terne metal	1,305	261	153
Type metal	22,006	2,314	2,370
Total	**559,089**	**63,492**	**64,467**
Pigments:			
White lead	10,485	1,218	1,592
Red lead and litharge	52,504	6,524	7,033
Pigment colors	9,858	1,130	1,089
Other*	3,550	423	437
Total	**76,397**	**9,295**	**10,151**
Chemicals:			
Tetraethyl lead	132,109	12,611	13,182
Misc. chemicals	2,243	177	271
Total	**134,352**	**12,788**	**13,453**
Miscellaneous Uses:			
Annealing	3,595	480	453
Galvanizing	897	98	182
Lead plating	110	5	9
Weights and ballast	5,138	616	491
Total	**9,740**	**1,199**	**1,135**
Other Uses:			
Unclassified	12,541	1,406	1,273
Total reported†	**792,119**	**88,180**	**90,479**
Estimated unreported consumption	20,000	2,000	2,000
Grand total†	**812,100**	**90,200**	**92,500**
Daily average‡	**2,671**	**3,007**	**2,984**

* Includes lead content of leaded zinc oxide production.
† Includes lead content of scrap used directly in fabricated products.
‡ Based on number of days in month without adjustment for Sundays and holidays.

U. K. Lead Consumption

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 pounds)

	1956	1957	1958
Jan.	31,012	29,657	29,607
Feb.	30,125	29,219	27,855
Mar.	30,099	29,144	29,713
Apr.	28,186	27,246	26,230
May	29,752	31,574	28,839
June	31,501	28,607	28,624
July	26,963	27,604	27,201
Aug.	25,077	24,756	21,726
Sept.	30,274	29,519	28,829
Oct.	32,057	32,486	31,356
Nov.	32,036	31,060	28,786
Dec.	25,963	26,530	....
Total	353,045	347,699	....

American Antimony

Monthly Average Prices
In bulk, f.o.b. Laredo
(Cents per lb. in ton lots)

	1955	1956	1957	1958
Jan.	28.50	33.00	33.00	33.00
Feb.	28.50	33.00	33.00	30.818
Mar.	28.50	33.00	33.00	29.00
Apr.	28.50	33.00	33.00	29.00
May	28.50	33.00	33.00	29.00
June	28.50	33.00	33.00	29.00
July	28.50	33.00	33.00	29.00
Aug.	30.66	33.00	33.00	29.00
Sept.	33.00	33.00	33.00	29.00
Oct.	33.00	33.00	33.00	29.00
Nov.	33.00	33.00	33.00	29.00
Dec.	33.00	33.00	33.00	29.00
Aver.	30.18	33.00	33.00	29.485

Consumers' Lead Stocks, Receipts and Consumption

(Bureau of Mines — In Short Tons)

	Stocks Sept. 30, 1958	Net Receipts in Oct.	Consumed in Oct.	Stocks Oct. 31, 1958
Soft lead	66,643	69,662	60,983	75,322
Antimonial lead	31,964	22,985	21,052	33,897
Lead in alloys	6,441	3,442	3,169	6,714
Lead in copper-base scrap	1,644	1,631	1,689	1,586
Total	106,692	97,720	*86,893	117,519

* Excludes 3,190 tons of lead which went directly from scrap to fabricated products and 396 tons of lead contained in leaded zinc oxide production.

Consumption of Lead by Class of Product

(Bureau of Mines — In Short Tons)

OCTOBER

	Soft lead	Antimonial lead	Lead in alloys	Lead in copper-base scrap	Total
Metal products	35,947	20,577	3,158	1,689	61,371
Pigments	9,738	17	...	...	9,755
Chemicals	13,453	...	...	...	13,453
Miscellaneous	738	397	...	...	1,135
Unclassified	1,107	61	11	...	1,179
Total	60,983	21,052	3,169	1,689	*86,893

* Excludes 3,190 tons of lead which went directly from scrap to fabricated products and 396 tons of lead contained in leaded zinc oxide production.

Domestic Zinc Statistics

American Zinc Institute

Commencing with January, 1948, all regularly operating U. S. primary and secondary smelters are included in this report. Production from foreign ores also is included.

(Tons of 2,000 lbs.)

	Stock Beginning	Production	Shipments—Domestic	Shipments—Export & Drawback	Shipments—Gov't Acc't	Shipments—Total	Stock at End	Daily Avg. Prod.
1950 Tl.	94,221	910,354	849,246	18,189	128,256	995,691	8,884	2,494
1950 Mo. Avg.		75,863	70,770	1,516	10,688	82,974		
1951 Total	8,884	931,833	836,800	42,067	39,949	918,816	21,901	2,553
1951 Mo. Avg.		77,653	69,733	3,506	3,329	76,568		
1952 Total	21,901	961,430	803,343	56,202	36,626	896,171	87,160	2,627
1952 Mo. Avg.		80,119	66,945	4,683	3,052	74,681		
1953 Total	87,160	971,191	818,850	16,326	42,332	877,508	180,843	2,661
1953 Mo. Avg.		80,933	68,238	1,361	3,528	73,126		
1954 Total	180,843	868,242	787,922	27,929	108,957	924,808	124,277	2,379
1954 Mo. Avg.		72,353	65,660	2,327	9,080	77,067		
1955 Total	40,979	1,031,018	1,007,619	19,497	87,200	1,114,316	40,979	2,825
1955 Mo. Avg.		85,918	83,968	1,625	7,267	92,860		
1956								
September	104,307	90,235	73,142	934	18,301	92,377	102,165	3,008
October	102,165	93,493	84,991	465	21,392	106,848	88,810	3,016
November	88,810	91,808	82,478	787	27,168	110,433	70,185	3,060
December	70,185	98,234	80,772	671	18,354	99,797	68,622	3,169
1956 Total		1,062,954	869,270	9,027	157,014	1,035,311	68,622	2,904
1956 Mo. Avg.		88,850	72,439	752	13,085	86,275		
1957								
January	68,622	93,452	67,273	450	15,377	83,100	78,974	3,014
February	78,974	88,078	67,731	1,527	10,905	80,163	86,889	3,146
March	86,889	96,924	67,441	1,558	25,608	94,607	89,357	3,127
April	89,357	96,506	55,000	1,411	23,921	80,332	105,531	3,217
May	105,531	96,855	60,729	2,106	26,858	89,693	112,693	3,124
June	112,693	90,719	54,275	1,358	14,324	69,957	133,455	3,024
July	133,455	85,779	57,862	4,497	11,186	73,055	146,179	2,767
August	146,179	84,166	70,318	860	9,871	81,049	149,296	2,715
September	149,296	77,455	62,111	530	10,344	72,985	153,766	2,582
October	153,766	81,492	66,225	372	12,736	79,333	155,925	2,629
November	155,925	79,754	73,437	581	9,148	83,166	152,531	2,658
December	152,531	86,270	62,730	210	9,188	72,128	166,655	2,783
1957 Total		1,067,450	765,132	15,460	179,466	815,567		
1958								
January	166,655	82,343	58,211	641	9,805	68,657	180,346	2,656
February	180,346	68,354	49,072	446	9,993	59,511	189,189	2,441
March	189,189	72,274	48,948	111	8,763	57,822	203,641	2,331
April	203,641	70,214	46,598	159	5,927	52,684	221,171	2,340
May	221,171	71,018	51,390	129	....	51,519	240,670	2,291
June	240,670	66,967	54,487	171	....	54,658	252,979	2,232
July	252,979	65,119	60,312	55	....	60,187	257,911	2,101
August	257,911	62,927	68,718	591	....	69,309	251,529	2,030
September	251,529	63,705	76,905	213	....	77,118	238,116	2,124
October	238,116	65,304	93,018	226	....	93,224	210,176	2,107
November	210,176	65,174	83,394	212	....	83,606	191,744	2,172
December	191,744	75,503	76,862	148	....	77,010	190,237	2,432
1958 Total		828,902	767,755	3,102	34,488	805,325	....	....

U. S. Consumption of Slab Zinc

Bureau of Mines

By Industries (Short Tons)

	Galvanizers	Die Casters	Brass products	Rolled zinc	Zinc oxide & other	Total
1950 Total	**434,094**	**281,385**	**136,451**	**67,779**	**27,656**	**947,365**
1951 Total	**386,378**	**266,442**	**141,456**	**64,000**	**28,738**	**887,009**
1952 Total	**375,563**	**236,022**	**155,811**	**51,508**	**30,885**	**849,289**
1953 Total	403,162	305,346	177,801	53 784	38,037	977,636
1954 Total	398,599	286,817	107,293	45,979	33,342	876,130
1955 Total	439,694	404,790	144,816	50,363	39,302	1,081,468
1956						
September	37,313	26,998	8,370	3,397	3,280	79,358
October	40,875	34.985	10,164	4,158	3.695	93,877
November	**36,767**	**32,812**	**9,581**	**3,625**	**3,539**	**87,224**
December	32,790	33,238	8,799	3,140	3,405	82,272
Total	421,218	352,451	122,395	45,382	36,251	988,097
1957						
January	**34,337**	**37,517**	**10,800**	**3,502**	**3,434**	**90,490**
February	**31,686**	**32,520**	**9,156**	**3,284**	**3,206**	**80,752**
March	**30,747**	**30,946**	**8,860**	**3,553**	**3,378**	**78,384**
April	**30,631**	**29,166**	**9,491**	**4,001**	**3,300**	**77,489**
May	**30,537**	**28,423**	**9,563**	**3,389**	**3,097**	**75,909**
June	**29,907**	**27,688**	**8,710**	**3,613**	**2,646**	**73,464**
July	**26,067**	**26,116**	**6,361**	**2,698**	**2,981**	**65,123**
August	27,885	29,237	9,755	3,686	3,099	74,562
September	28,651	31,051	9,588	2,911	1,590	75,976
October	32,940	35,499	10,952	3,385	1,783	87,898
November	28,025	31,396	10,024	2,843	1,255	76,595
December	24,383	27,927	7,854	2,679	1,427	67,421
Total	355,796	358,543	111,114	39,544	20,486	924,063
1958						
January	26,861	26,348	9,115	3,183	1,664	69,295
February	24,598	22,629	7,279	2,716	1,316	60,347
March	27,171	19,045	6,871	3,138	1,724	59,978
April	27,464	17,829	6,392	3,259	1,295	58,432
May	30,935	18,316	6,597	2,896	2,263	61,907
June	34,377	21,497	6,643	2,961	2,212	67,690
July	30,677	17,387	6,275	2,848	1,920	60,007
August	34,663	20,382	8,358	3,379	1,901	70,033
September	34,048	25,188	9,624	3,458	770	74,122
October	36,513	27,682	11,753	3,845	881	81,919

Prime Western Zinc Prices

(East St. Louis, f.o.b.)

(Cents per pound)

(In tons of 2,240 pounds)

	1955	1956	1957	1958
Jan.	11.50	13.46	13.50	10.00
Feb.	11.50	13.50	13.50	10.00
Mar.	11.50	13.50	13.50	10.00
Apr.	11.93	13.50	13.50	10.00
May	12.00	13.50	11.933	10.00
June	12.25	13.50	10.84	10.00
July	12.50	13.50	10.00	10.00
Aug.	12.50	13.50	10.00	10.00
Sept.	12.92	13.50	10.00	10.00
Oct.	13.02	13.50	10.00	10.865
Nov.	13.00	13.50	10.00	11.386
Dec.	13.00	13.50	10.00	11.50
Aver.	**12.305**	**13.497**	**11.40**	**10.313**

High Grade Zinc Prices

(Delivered)

N. Y. Monthly Averages

(Cents per pound)

	1955	1956	1957	1958
Jan.	12.85	14.81	14.85	11.35
Feb.	12.85	14.85	14.85	11.35
Mar.	12.85	14.85	14.85	11.35
Apr.	13.28	14.85	14.85	11.084
May	13.35	14.85	13.283	11.00
June	13.60	14.85	12.19	11.00
July	13.85	14.85	11.35	11.00
Aug.	13.85	14.85	11.35	11.00
Sept.	14.31	14.85	11.35	11.00
Oct.	14.37	14.85	11.35	11.865
Nov.	14.35	14.85	11.35	12.386
Dec.	14.35	14.85	11.35	12.50
Aver.	**13.655**	**14.847**	**12.75**	**11.407**

U. K. Zinc Consumption

(British Bureau of Non-Ferrous Metal Statistics)

(In Tons of 2,240 Pounds)

	1956	1957	1958
Jan.	29,779	28,485	27,473
Feb.	29,568	26,276	24,551
Mar.	28,650	27,049	26,967
Apr.	25,348	24,247	24,984
May	27,922	29,589	24,579
June	26,650	25,202	25,587
July	23,826	25,934	23,794
Aug.	18,867	20,381	19,076
Sept.	25,470	27,792	26,747
Oct.	27,784	29,552	29,838
Nov.	27,713	26,705	26,432
Dec.	24,134	24,419	....
Total	**315,711**	**315,631**	....

Mine Production of Zinc in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern States	Central States	Western States	Total U.S.*
1953				
Total	183,612	57,300	293,818	534,730
1954				
Total	166,487	63,100	234,942	464,539
1955				
Total	163,230	73,630	277,811	514,671
1956				
Total	175,310	61,080	301,253	537,643
1957				
May	17,066	1,744	28,314	47,123
June	16,981	2,855	25,664	45,940
July	15,391	2,679	24,602	42,672
Aug.	17,078	1,858	23,440	42,376
Sept.	14,111	187	20,481	34,779
Oct.	17,839	188	21,323	34,390
Nov.	14,874	180	19,213	34,967
Dec.	13,893	173	18,683	34,364
Total	196,877	29,506	290,151	520,128
1958				
Jan.	16,165	1,682	20,861	38,708
Feb.	13,652	1,365	18,528	33,545
Mar.	13,922	1,291	20,411	35,624
Apr.	15,719	1,311	22,375	39,405
May	15,580	1,314	18,940	35,834
June	14,931	1,490	16,650	32,971
July	13,427	——	15,985	29,442
Aug.	15,760	——	13,627	29,387
Sept.	14,857	——	15,279	29,865
Oct.	16,197	——	16,074	32,271

*Includes Alaskan output in some months.

Mine Production of Lead in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern States	Central States	Western States	Total U.S.*
1952				
Ttl.	11,252	150,302	228,607	390,161
1953				
Ttl.	9,970	136,650	188,776	335,412
1954				
Ttl.	8,608	138,940	169,804	317,352
1955				
Ttl.	10,379	145,640	177,409	333,409
1956				
Ttl.	11,395	141,900	195,034	348,329
1957				
Apr.	1,053	12,695	17,167	30,915
May	988	11,107	17,760	29,855
June	648	10,569	15,500	26,717
July	532	11,430	15,032	26,994
Aug.	674	11,168	15,654	27,496
Sept.	744	9,935	14,087	24,766
Oct.	759	12,392	14,950	28,101
Nov.	619	10,170	12,519	23,308
Dec.	599	9,887	12,393	22,880
Ttl.	9,300	135,800	188,392	333,493
1958				
Jan.	675	12,513	12,613	25,801
Feb.	542	11,356	11,734	23,632
Mar.	526	4,633	13,148	18,307
Apr.	487	12,438	12,739	25,664
May	626	11,660	11,939	24,225
June	615	10,662	11,499	22,776
July	454	10,019	10,662	21,135
Aug:	447	8,859	9,512	18,818
Sept.	389	7,734	11,221	19,344
Oct.	517	9,290	11,467	21,274

Mine Production of Gold in United States

(U. S. Bureau of Mines)

(In fine ounces)

	Eastern States	Western States	Alaska*	Total
1955				
Ttl.	2,026	1,634,625	247,535	1,884,186
1956				
Ttl.	1,998	1,607,930	204,300	1,814,228
1957				
May	165	137,953	5,839	143,957
June	204	129,196	11,457	140,857
July	203	128,073	33,723	161,999
Aug.	192	126,219	37,933	164,344
Sept.	178	124,454	42,434	167,066
Oct.	183	136,248	38,585	175,016
Nov.	182	125,796	27,000	152,978
Dec.	181	123,250	6,790	130,221
Ttl.	2,174	1,556,450	210,000	1,768,624
1958				
Jan.	207	134,282	2,736	137,226
Feb.	147	116,392	59	116,598
Mar.	174	123,808	96	124,078
Apr.	192	124,705	906	125,615
May	203	124,490	557	125,520
June	182	122,277	8,484	130,943
July	38	116,775	29,735	146,528
Aug.	174	113,281	34,947	148,202
Sept.	156	128,613	38,960	167,459
Oct.	186	135,882	42,467	178,535

* Alaska totals based on mint and smelter receipts.

Mine Production of Recoverable Silver in United States

(U. S. Bureau of Mines)

(In Fine Ounces)

	Eastern States	Missouri	Western States	Alaska*	Total
1955 Total	159,038	438,000	36,103,723	33,804	36,734,565
1956 Total	553,982	377,200	36,169,267	26,700	37,127,149
1957					
October	47,892	29,800	3,036,720	4,816	3,119,228
November	50,821	8,020	2,690,456	3,537	2,752,834
December	50,825	7,000	2,673,590	810	2,732,225
Total	610,386	240,000	37,018,950	26,000	37,895,336
1958					
January	45,358	17,400	2,939,634	324	3,002,716
February	38,608	16,000	2,788,072	5	2,842,685
March	38,134	5,500	2,834,641	10	2,878,285
April	38,308	17,800	2,807,664	57	2,863,829
May	41,840	22,870	2,746,539	60	2,811,309
June	3,637	21,300	2,775,606	138	2,800,681
July	7,723	21,840	2,503,013	680	2,533,256
August	8,819	19,970	2,836,937	1,369	2,417,095
September	5,783	17,180	2,621,537	1,693	2,646,193
October	5,653	20,600	2,749,976	5,331	2,781,560

* Alaska totals based on mint and smelter receipts.

U. S. Silver Production*

(A.B.M.S.)

(In thousands of ounces; commercial bars, 0.999 fine, and other refined forms)

	Dom.†	For.	Total
1954 Total	38,059	39,422	77,481
1955 Total	33,101	32,780	65,881
1956 Total	38,157	40,160	78,317
1957			
April	3,735	2,807	6,542
May	2,486	1,388	3,874
June	3,386	2,880	6,266
July	2,859	3,452	6,311
Aug.	2,500	2,558	5,058
Sept.	2,937	3,263	6,200
Oct.	3,334	3,419	6,753
Nov.	2,731	3,374	6,105
Dec.	3,029	2,872	5,901
Total	36,279	34,932	71,211
1958			
January	3,520	3,551	7,071
February	3,589	2,790	6,379
March	2,465	3,568	6,033
April	3,123	3,056	6,179
May	2,597	2,660	5,257
June	3,243	3,210	6,453
July	2,127	2,494	4,621
August	2,651	3,235	5,886
September	2,614	3,165	5,779
October	3,831	2,750	6,581
November	2,505	3,283	5,788

* The separation between silver of foreign and domestic origin on the basis of refined bars and other refined forms is only approximate.

† Includes purchases of crude silver by the U. S. Mint.

Production of Primary Aluminum in the U. S.

(U. S. Bureau of Mines)

(In short tons)

	1951	1952	1953	1954	1955	1956	1957	1958
Jan.	67,954	76,934	89,895	116,247	128,203	140,394	147,029	139,910
Feb.	62,740	72,374	92,649	110,483	116,236	132,763	119,059	121,980
Mar.	70,022	77,069	104,460	122,339	130,272	145,895	135,706	134,019
Apr.	67,701	76,880	102,071	120,434	126,394	144,726	139,152	128,559
May	67,720	80,803	105,464	125,138	131,128	150,800	145,174	129,083
June	67,454	77,476	104,152	120,758	127,634	145,726	138,007	115,325
July	72,698	78,368	109,285	126,161	132,669	151,624	142,157	118,811
Aug.	73,816	85,175	110,545	125,296	133,551	92,406	143,449	125,416
Sept.	69,429	76,882	109,333	120,332	130,606	132,316	129,278	124,713
Oct.	72,647	77,312	108,219	125,089	134,655	149,125	133,759	139,847
Nov.	72,246	74,639	105,636	121,252	133,689	145,081	135,024	140,962
Dec.	72,454	83,419	110,291	127,056	140,748	148,391	140,033	.....
Ttl.	836,881	937,330	1,252,013	1,460,565	1,565,721	1,679,427	1,647,710	.....

Average Silver Prices

(Cents per fine ounce)

	1955	1956	1957	1958
Jan.	85.25	90.357	91.375	89.449
Feb.	85.25	90.90	91.375	88.625
Mar.	85.25	91.128	91.375	88.625
Apr.	87.08	90.875	91.375	88.625
May	88.928	90.75	91.307	88.625
June	89.71	90.46	90.456	88.625
July	90.49	90.14	90.31	88.625
Aug.	90.75	90.614	90.909	88.625
Sept.	90.795	90.75	90.602	88.673
Oct.	91.794	90.722	90.625	89.966
Nov.	91.46	91.375	90.382	90.125
Dec.	90.45	91.375	89.80	89.932
Aver.	89.116	90.79	90.824	89.043

Note — The averages are based on the price of refined bullion imported on or after August 31, 1943.

U. S. Copper Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1958		
	Aug.	Sept.	Oct.
Ore, matte & regulus (cont.)	3,908	4,477	5,051
Canada	60	211	125
Mexico	311	351	579
Cuba	942	2,150	829
Argentina	143	12	12
Bolivia	29	364	73
Chile	378	1,274	1,254
Peru	761	109	708
Philippines	...	1	...
U. of S. Africa	1,160	...	1,350
Australia	118	...	65
Other countries	6	5	56
Blister copper (content)	20,388	22,830	19,538
Mexico	1,159	3,984	1,613
Chile	17,976	14,041	15,427
Peru	...	1,796	...
Rhodesia & Nyasaland	695	647	827
U. of S. Africa	556	2,362	...
Australia	...	...	1,671
Other countries	2	...	...
Refined cathods and shapes	3,443	5,120	2,940
Canada	2,241	3,970	932
Chile	...	...	250
Belgian Congo	1,200	1,150	1,716
Rhodesia & Nyasaland	...	...	42
Total Imports:			
Crude & refined	27,739	32,427	27,529
Old and scrap (content)	113	186	349
Composition metal (content)	2	...	...
Brass scrap and old (cu. cont.)	...	1,680	316

U. S. Zinc Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1958		
	Aug.	Sept.	Oct.
Zinc ore (cont.)	26,312	31,222	23,998
Canada	10,345	12,042	10,928
Mexico	9,396	11,479	4,889
Cuba	17	26	...
Guatemala	1,013	...	...
Honduras	143	69	112
Bolivia	62	71	162
Colombia	5	...	14
Chile	3	361	7
Peru	4,890	6,262	6,954
U. of S. Africa	...	550	560
Australia	233	315	255
Philippines	19	3	7
Other countries	186	44	110
Zinc blocks, pigs, etc.	16,871	20,897	18,320
Canada	9,760	13,988	7,092
Mexico	2,106	2,151	888
Peru	149	50	200
Belgium	1,435	1,688	4,790
Germany (W.)	...	110	710
Italy	55	55	1,929
Norway	417	...	281
U. Kingdom	...	...	112
Yugoslavia	1,075	772	1,047
Belgian Congo	1,874	1,747	1,047
Rhodesia & Nyasaland	...	336	224
Total Imports:			
Zinc ore, blocks, pigs	43,183	52,119	42,318
Dross & skim.	48	51	73
Old and worn out	...	22	...

U. S. Copper Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1958		
	Aug.	Sept.	Oct.
Ore, conc., matte & other unref. (content)	973	412	1,123
Refined ingots, bars, etc.*	40,551	32,238	43,141
Canada	259	163	253
Mexico	...	551	52
Argentina	2,632	427	110
Brazil	847	1,897	515
Austria	168	...	...
Belgium	383	784	119
Denmark	...	...	224
France	5,280	2,616	13,505
Germany (W.)	10,294	8,588	8,223
Italy	3,692	2,894	3,127
Netherlands	2,042	560	1,349
Norway	122	168	336
Portugal	...	1	...
Spain	...	66	...
Sweden	222	168	1,288
Switzerland	1,918	531	1,036
U. Kingdom	10,770	12,629	11,527
Yugoslavia	1,120	...	...
India	...	26	112
Japan	684	55	1,070
Australia	112	112	...
Other countries	6	2	295
Total Exports:			
Crude & refined	41,524	32,650	44,264
Pipes and tubes	103	73	127
Plates and sheets	7	7	17
Rods, brush-copper, castings, rolls, segments (finished form) n.e.s.	281	514	433
Wire, bare	158	430	435
Building wire and cable†	219	220	318
Weatherproof wire†	5	13	14
Insulated copper wire n.e.s.†	794	1,191	1,203

* Includes exports of refined copper resulting from scrap that was reprocesed on toll for account of the shipper.

† Gross weight; n.e.s. — not elsewhere specified.

U. S. Copper Scrap Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1958		
	Aug.	Sept.	Oct.
Copper scrap, unalloyed* (new and old)	1,488	1,579	2,062
Canada	21	19	17
Belgium	11	...	...
France	34	44	34
Germany (W.)	1,216	1,165	1,321
Italy	27	...	255
Netherlands	33	82	248
Spain	...	55	11
India	143	214	149
Other countries	3	...	27
Copper-base scrap, alloyed† (new and old)	1,803	2,781	2,062
Canada	5	...	4
Belgium	50	...	...
France	160	396	28
Germany (W.)	875	612	463
Italy	314	398	228
Netherlands	6	116	16
Spain	...	343	170
Switzerland	...	...	72
India	11	17	9
Japan	377	818	1,057
Hong Kong	...	69	11
Other countries	5	12	4

* Ash, brass mill, clippings, dross, flue dust, residues, scale, skimmings, wire scrap.

† Copper-base alloys, including brass and bronze —Ashes, clippings for remanufacture, cupro-nickel scrap, cupro-nickel trimmings, nickel silver scrap, phosphor bronze, phosphor-copper, skimmings, turnings, round.

U. S. Lead Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1958		
	Aug.	Sept.	Oct.
Ore, matte, etc. (content)	15,852	12,944	16,682
Canada	1,798	1,165	2,030
Greenland	2,585	...	...
Mexico	51	146	31
Guatemala	413	216	...
Honduras	355	157	581
Bolivia	2,208	775	1,047
Chile	84	...	18
Colombia	6	...	234
Peru	7,253	4,795	3,175
U. of S. Africa	...	4,250	8,860
Australia	790	1,306	611
Philippines	238	122	78
Other countries	50	12	17
Base bullion (content)	...	5	...
Other countries	...	5	...
Pigs and bars	23,945	40,822	20,001
Canada	4,560	6,638	3,275
Mexico	7,445	22,247	6,181
Peru	2,472	3,674	1,542
Belgium	...	...	280
Denmark	...	9	22
Spain	1,102	1,323	3,064
Yugoslavia	1,380	5,283	926
Morocco	555	...	264
Australia	6,431	1,648	4,447
Total Imports:			
Ore, base bullion, refined	39,797	53,771	36,683
Lead scrap, dross, etc. (cont.)	228	248	131
Antimonial lead & typemetal	372	310	291
Lead content thereof	323	302	284

U. S. Zinc Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1958		
	Aug.	Sept.	Oct.
Slabs, blocks, etc.	16	10	433
Cuba	...	...	28
Taiwan	...	...	405
Other countries	16	10	...
Total Exports:			
Ore, conc., slabs, blocks	16	10	433
Scrap, ashes, dross and skimmings	696	619	261
Battery shells and parts, unassembled	...	15	15
Rolled in sheets, plates & strips & die castings	177	320	482
Zinc and zinc alloys in crude and semifabricated forms	79	50	125
Zinc oxide	260	271	275

Comparative Metal Prices

	Av. 1939	OPA Av. 1946	1959 Jan. 23
Copper, domestic Electro., Del. Valley	11.20	14.375	29.00-29.50
Lead (N. Y.)	5.05	8.25	12.00
P. W. Zinc (E. St. Louis, f.o.b.)	5.05	5.05	11.50
New York, del.	...	...	12.00
Tin, Spot Straits, N. Y.	...	...	99.75
Aluminum ingot 99½%+	20.00	15.00	26.80
Antimony (R.M.M. brand, f.o.b. Laredo)	12.36	14.50	29.00

World Production of Copper

(American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States (a)	Canada (b)	Mexico (crude) (c)	Chile (d)	Peru (d)	Fed. Rep. of Germany (e)	Norway (f)	United Kingdom (g-h)	Yugoslavia (c)	India (f-h)	Japan (e)	Turkey (f)	Australia (c)	Northern Rhodesia (e)	Union of South Africa (d)
1954															
Total	863,721	302,984	59,030	372,814	29,233	258,259	14,205	152,858	33,394	8,274	117,371	27,727	42,241	336,577	43,153
1955															
Total	1,036,702	326,599	61,583	447,288	35,478	286,805	14,876	138,271	31,151	8,432	124,903	26,313	41,935	350,302	47,176
1956															
Total	1,133,134	356,251	69,918	506,251	35,005	279,461	16,457	127,365	32,390	8,827	139,062	27,101	55,711	435,186	47,914
1957															
July	86,141	26,349	5,961	40,351	5,839	24,170	1,418	11,492	3,096	774	14,585	961	5,450	31,450	3,305
Aug.	89,680	30,025	5,144	36,744	4,005	24,709	1,649	5,926	3,461	718	14,667	1,757	5,639	29,212	4,356
Sept.	87,270	30,220	4,960	32,822	4,270	24,654	1,725	12,237	3,996	757	14,448	3,398	5,072	42,871	3,864
Oct.	93,078	31,334	6,140	43,096	3,000	23,955	1,581	10,368	3,025	999	13,311	1,880	4,778	43,123	4,000
Nov.	90,045	35,823	5,778	42,995	3,227	23,127	1,464	9,606	3,080	775	13,166	1,862	4,527	44,013	5,134
Dec.	95,285	35,593	5,446	43,765	4,786	21,786	1,424	9,607	3,207	810	13,038	2,114	4,388	42,459	4,672
Total	1,115,483	360,745	42,905	....	46,141	255,710	17,265	121,799	37,186	9,298	143,654	27,101	55,633	499,418	47,828
1958															
Jan.	94,735	32,841	5,272	41,578	3,990	23,790	1,554	7,909	3,000	348	12,345	2,091	4,334	42,996	4,285
Feb.	87,130	30,639	4,849	39,648	3,235	21,792	1,340	11,495	3,054	756	10,806	1,509	4,045	36,364	4,708
Mar.	90,336	34,190	5,954	40,205	3,497	25,161	1,569	9,559	6,023	821	10,195	2,580	5,555	44,847	4,731
April	86,123	32,635	6,101	16,115	4,010	23,286	1,463	9,884	3,149	788	8,515	2,942	6,220	41,396	4,413
May	80,628	32,471	6,141	23,264	3,481	24,543	1,636	7,095	2,957	786	9,806	2,574	6,229	41,615	4,488
June	71,092	32,418	5,954	34,811	3,405	23,128	1,674	7,414	3,102	769	10,617	1,810	6,819	44,447	4,018
July	64,444	31,131	5,995	40,495	3,780	24,418	1,610	9,091	3,245	801	10,762	1,136	6,139	44,010	3,324
Aug.	67,917	50,867	6,340	45,211	3,646	26,409	1,855	3,451	2,838	786	11,053	....	6,220	42,000	4,974
Sept.	79,541	27,546	6,294	40,913	3,637	24,649	1,749	12,027	2,870	792	12,583	....	....	17,291	4,726
Oct.	92,214	....	5,380	47,230	2,950	27,200	....	11,225	....	809	13,310	....	....	....	....
Nov.	96,532	....	5,040	....	3,923	....	....	....	....	....	....	....	....	25,612	....

(a) Reported by Copper Institute. Crude, "recoverable contents of mine production or smelter production or shipments, and custom intake." Does not include intake of scrap nor of imported ore except that received from Cuba and Philippines. (b) Blister copper plus recoverable copper in concentrates, matte, etc., exported. (c) Crude copper, i. e., copper content of blister or converter copper as originally produced in the several countries, although some of it may be refined at home; e. g., in Rhodesia. (d) Blister and/or refined. (e) Refined. There are quantities of scrap included in the electrolytic production in addition to that reported, tonnage of which is not obtainable. (f) Smelter production. (g) Refinery production from imported blister only. (h) British Bureau of Non-Ferrous Metal Statistics. * Refined.

World Production of Refined Lead

(American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States	Canada	Mexico	Peru	Belgium	France	Fed. Rep. of Germany	Italy	Spain	Yugoslavia	Japan	Australia (a)	French Morocco	Tunisia	Rhodesia	Total
1953																
Total	533,883	166,356	225,075	66,520	84,162	60,357	164,077	40,786	53,799	78,038	25,513	241,419	29,970	30,397	12,891	1,813,773
1954																
Total	551,618	166,379	221,595	63,735	79,260	71,083	162,773	41,150	62,475	78,555	37,612	260,424	29,417	30,015	16,800	1,877,841
1955																
Total	547,153	148,811	221,138	67,303	91,241	73,251	162,508	46,806	67,509	83,347	40,912	254,558	28,870	28,620	17,976	1,893,125
1956																
Total	613,293	147,865	213,524	61,917	111,479	73,251	178,713	42,780	64,824	83,507	51,019	256,300	30,993	26,623	17,024	1,984,344
1957																
July	47,100	12,098	15,831	6,768	8,083	7,396	16,315	4,000	5,893	6,687	4,786	22,242	3,113	2,270	1,456	164,802
Aug.	48,191	12,568	26,341	7,258	7,961	7,443	15,403	2,869	6,124	7,691	4,766	23,548	2,477	1,903	1,456	177,247
Sept.	50,436	11,288	20,151	6,553	8,053	7,768	15,938	4,173	5,866	6,356	5,366	24,209	2,463	1,821	1,456	174,013
Oct.	52,041	10,302	18,627	6,323	9,615	7,874	17,643	3,491	6,582	7,409	5,297	19,639	2,733	2,512	1,456	171,334
Nov.	48,771	12,125	19,491	6,374	9,257	8,396	16,703	4,063	4,840	7,373	5,678	24,987	2,806	2,598	1,456	177,739
Dec.	50,500	12,504	19,465	6,951	8,191	7,512	17,215	4,231	5,460	7,846	5,785	24,095	4,173	3,123	1,568	180,412
Total	604,533	142,935	218,266	55,971	....	94,509	195,136	42,336	61,332	85,313	59,670	261,035	34,441	27,069	12,364	2,052,431
1958																
Jan.	47,665	12,672	20,144	6,188	8,375	7,501	18,017	4,013	5,297	6,042	4,974	25,518	3,323	1,785	1,232	173,922
Feb.	47,133	11,432	18,341	5,306	8,347	7,959	15,939	4,433	5,337	7,452	4,352	23,628	3,326	2,781	1,176	167,791
Mar.	43,441	12,837	18,455	6,899	8,773	7,890	16,548	4,597	6,392	8,600	4,335	26,359	3,375	1,174	1,204	171,654
April	40,984	11,785	21,099	5,626	8,917	8,858	15,144	4,652	6,281	7,021	3,481	19,876	2,338	2,394	1,204	160,946
May	47,487	12,212	21,005	5,421	9,058	8,339	16,327	2,402	6,944	7,482	3,541	25,035	3,532	2,978	1,204	174,255
June	44,636	12,706	17,846	6,255	8,264	7,977	15,194	3,677	6,403	6,469	3,461	22,979	2,906	3,127	1,232	164,278
July	38,827	7,175	18,315	6,880	8,548	8,319	11,229	4,581	6,327	6,872	3,567	21,563	2,767	568	1,232	147,624
Aug.	39,250	6,940	17,991	6,100	7,495	15	13,760	4,584	6,913	5,414	3,610	19,942	2,584	2,756	1,176	140,501
Sept.	43,269	10,908	16,256	5,192	7,849	8,202	15,700	4,367	5,692	6,942	3,587	22,632	2,184	2,369	1,120	.....
Oct.	45,467	....	11,968	5,074	7,940	9,308	17,130	4,639	7,121	....	3,522	....	3,560	2,410	1,176	.....
Nov.	40,485	....	17,067	6,448	....	....	....	....	....	....	....	....	....	....	1,120	.....

(a) Production credited to Australia includes lead refined in England from Australian base bullion.

World Production of Slab Zinc

(American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States (a)	Can. (b)	Mexico	Peru (b-c)	Belgium	France (a)	Fed. Rep. of Germany	Great Britain	Italy	Netherlands	Norway (b)	Spain	Yugoslovia	Japan (a)	Australia (b)	Rhodesia (b)	Total (d)
1953																	
Total	971,191	247,707	59,589	9,819	213,215	89,218	163,430	81,436	65,730	27,721	42,566	24,152	16,037	86,833	101,003	28,370	2,228,017
1954																	
Total	868,242	218,810	60,477	16,982	234,896	122,248	184,806	90,937	74,356	28,686	48,768	25,109	15,040	112,292	117,066	29,736	2,345,591
1955																	
Total	1,031,018	257,008	61,879	18,943	233,623	123,623	197,024	90,917	77,761	31,202	49,724	26,244	15,175	122,965	113,221	31,248	2,534,457
1956																	
Total	1,062,954	255,601	62,136	10,428	251,906	124,105	204,961	90,784	80,407	32,123	53,170	25,224	15,434	153,821	117,445	32,396	2,630,383
1957																	
May	96,855	20,565	5,219	2,650	23,119	17,700	17,108	7,345	7,089	2,881	4,468	1,836	2,748	14,213	10,336	2,800	238,011
June	90,719	19,929	5,011	2,701	21,695	12,498	16,521	6,829	7,110	2,646	4,473	1,753	2,639	13,875	8,355	2,800	225,611
July	85,779	20,062	5,263	3,078	20,176	12,511	16,615	7,236	7,173	2,629	4,690	2,049	2,752	14,245	12,229	2,856	225,017
Aug.	84,166	20,305	5,144	3,233	19,391	12,387	16,617	7,272	7,029	2,641	4,378	2,143	2,740	14,008	10,675	2,856	220,388
Sept.	77,455	20,247	5,090	3,000	20,129	10,631	16,389	7,100	6,954	2,698	4,476	1,911	2,745	13,753	10,300	2,800	211,477
Oct.	81,490	20,890	5,351	2,892	21,688	12,305	16,800	7,292	6,133	2,781	4,419	2,011	2,011	14,215	10,829	2,856	221,830
Nov.	79,754	20,933	5,227	3,014	21,660	11,884	16,580	7,036	5,712	2,763	4,399	2,164	2,164	12,905	10,521	2,772	215,399
Dec.	86,270	21,829	5,441	3,333	22,274	12,413	17,684	7,483	6,596	2,742	4,483	2,789	2,189	13,638	10,895	2,828	230,624
Total	1,574,500	247,356	62,354	35,772	259,701	148,455	202,627	85,348	81,179	32,786	52,787	24,279	30,256	152,145	123,587	33,040	2,692,833
1958																	
Jan.	82,343	21,801	5,561	3,271	22,382	12,795	17,187	7,179	4,911	2,654	4,134	2,209	2,943	13,126	10,816	2,828	221,112
Feb.	68,354	19,743	4,985	2,669	22,026	12,028	15,562	6,599	5,275	2,659	4,030	1,975	2,797	12,072	9,642	2,576	199,114
Mar.	72,274	22,314	5,620	2,782	21,453	13,786	16,743	7,584	6,549	2,709	3,851	2,045	3,013	13,217	10,707	2,856	214,049
April	70,214	20,989	5,289	2,597	20,886	14,985	15,693	8,018	6,925	2,586	3,850	2,207	2,853	9,305	10,424	2,772	204,625
May	71,018	21,269	5,254	2,699	20,949	15,279	16,128	6,343	7,202	2,442	3,962	2,372	2,871	13,504	10,918	2,856	211,529
June	66,967	20,354	5,016	2,429	20,094	14,243	15,663	7,202	7,731	2,221	3,307	2,309	2,854	14,040	10,988	2,744	204,067
July	65,119	20,878	5,285	2,520	19,556	14,295	16,210	7,140	5,879	2,471	3,815	2,296	2,928	15,835	10,742	2,884	203,828
Aug.	62,297	21,152	5,216	2,822	18,308	14,253	16,204	6,689	5,991	2,533	3,793	2,259	2,820	12,420	11,075	2,912	.....
Sept.	63,705	20,531	5,025	2,640	17,961	12,232	15,635	6,887	7,701	2,145	4,581	2,313	2,820	11,476	10,823	2,828	.....
Oct.	65,304	21,125	5,344	2,305	17,866	14,176	16,462	6,046	6,442	2,280	4,915	....	....	14,436	....	2,940	.....
Nov.	65,174	....	5,197	2,625	....	....	....	6,158	....	2,249	4,669	....	....	....	....	2,828	.....

(a) Partially electrolytic. (b) Entirely electrolytic. (c) Beginning 1954 both electrolytic and electrochemic. (d) The above totals omit production in Russia, Czechoslovakia, Poland and in Argentina.

U. K. Virgin Copper Stocks

(In long tons)

(British Bureau of Non-Ferrous Metal Statistics)

At start of:	1956	1957	1958
Jan.	76,197	59,614	91,477
Feb.	79,377	59,203	82,483
Mar.	71,634	62,120	89,147
Apr.	73,776	61,779	94,330
May	76,481	71,101	88,582
June	71,713	61,991	88,913
July	76,188	64,121	81,851
Aug.	68,197	81,146	84,756
Sept	72,069	98,595	89,899
Oct.	62,327	100,815	85,092
Nov.	58,893	90,877	74,686
Dec.	55,838	81,657	69,023

U. K. Refined Lead Stocks

(British Bureau of Non-Ferrous Metal Statistics)

(In long tons)

At start of:	1956	1957	1958
Jan.	40,987	39,420	51,295
Feb.	34,326	41,433	49,134
Mar.	29,693	36,900	47,738
Apr.	33,974	34,877	40,547
May	29,479	44,933	37,509
June	30,537	40,804	34,608
July	37,088	42,148	40,518
Aug.	35,432	48,275	37,148
Sept.	35,793	51,435	43,758
Oct.	39,391	45,301	48,856
Nov.	32,662	50,371	40,216
Dec.	32,025	48,065	35,335

U. K. Stocks of Zinc

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

At start of:	Virgin Zinc 1957	Virgin Zinc 1958	Zinc Conc. 1957	Zinc Conc. 1958
Jan.	44,816	44,926	53,274	79,349
Feb.	40,501	43,308	63,366	82,125
Mar.	38,927	46,662	59,957	87,721
Apr.	41,260	46,608	55,698	84,631
May	37,540	47,251	52,871	80,964
June	36,000	50,539	49,646	74,470
July	37,384	49,613	55,900	71,553
Aug.	35,561	48,497	52,588	70,105
Sept.	44,207	49,590	59,028	63,909
Oct.	41,255	45,784	65,347	57,376
Nov.	42,095	39,341	67,828	53,371
Dec.	41,895	35,396	73,331	58,022

U. K. Copper Exports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

(Gross Weight)	1958 Sept.	1958 Oct.	1958 Nov.
Copper unwrought—ingots, blocks, slabs, bars, etc.	4,980	6,468	6,600
Plates, sheets, rods, etc.	1,284	2,423	7,735
Wire (including uninsulated electric wire)	9,808	9,934	6,402
Tubes	1,298	1,472	1,445
Other copper, worked (incl. pipe fittings)	71	112	120
Total	17,441	20,409	22,302

Copper Consumption in United Kingdom

British Bureau of Non-Ferrous Metal Statistics

(In tons of 2,240 pounds)

	Unalloyed	Alloyed*	Total	Virgin	Scrap
1955 Total	377,576	281,953	659,529	496,467	163,062
1956 Total	388,167	251,312	639,479	500,794	138,685
1957					
July	32,049	19,388	51,437	38,441	12,996
August	24,606	14,834	39,440	30,583	8,857
September	35,404	19,666	55,070	43,883	11,187
October	38,044	22,004	60,048	49,638	10,410
November	35,102	20,506	55,608	44,144	11,464
December	30,043	18,591	48,634	38,104	10,530
Total	407,326	234,158	641,484	507,493	133,991
1958					
January	35,799	20,816	56,615	46,437	10,178
February	32,207	19,352	51,559	37,907	13,652
March	33,491	19,580	53,071	41,539	11,532
April	36,722	19,100	55,822	43,784	12,038
May	35,810	18,423	54,233	43,571	10,662
June	39,277	18,141	57,418	46,080	11,338
July	36,743	17,091	53,564	42,373	11,191
August	28,416	13,756	42,181	33,073	9,108
September	42,813	18,596	61,408	52,018	9,390
October	43,402	21,788	65,190	53,937	11,253
November	40,987	19,232	60,219	47,932	12,287

* Includes copper sulphate effective October, 1954.

U. K. Zinc Imports

(British Bureau of Non-Ferous Metal Statistics)

(In tons of 2,240 lbs.)

(Gross Weight)	1958 Sept.	1958 Oct.	1958 Nov.
Zinc ore and conc.	...	5,964	26,969
Zinc conc.*	974	2,226	N.A.
Australia	209	1,618	..
Burma	765	608	...
Zinc and zinc alloys	3,796	10,322	9,440
Rhodesia-Nyasaland	300	175	125
Australia	...	1,076	500
Canada	4,682	4,821	4,056
Belgium	667	1,157	1,703
Germany (W.)	2	...	2
Netherlands	...	...	200
Soviet Union	1,103	855	1,655
United States	12	106	7
Belgian Congo	..	1,000	...
Other countries	2,030	1,132	1,192
Zinc and zinc alloys	744	669	1,033

* British Bureau of Non-Ferrous Metal Statistics. The estimated zinc content is not the content of the gross weight as officially reported for any comparable period.

Zinc Imports and Exports By Principal Countries

(A. B. M. S.)

Reported in ingots, slabs, etc.; metric tons except where otherwise noted.

IMPORTS

	1958 Aug.	1958 Sept.	1958 Oct.
U. S. (s.t.)	16,871	20,897	...
Canada (s.t.)	63	...	...
Denmark	1,346	627	1,979
France	934	1,533	2,181
Italy	275	...	...
Netherlands	1,005	1,329	1,080
Sweden	2,778	1,530	...
Switzerland†	1,558	466	1,133
U. K. (l.t.)	9,572	8,796	10,322
India* (l.t.)	4,187	2,720	4,536

EXPORTS

U. S. (s.t.)	16	10	...
Canada (s.t.)	15,906	8,670	22,810
Denmark	449	276	369
France	52	...	5
Italy	504	...	...
Netherlands	392	479	674
Norway	1,765	3,573	...
Switzerland†	361	852	244
U. K.‡ (l.t.)	574	744	669
Northern Rhodesia* (l.t.)	2,376	2,006	...

† Includes scrap.

‡ Includes manufactures.

* British Bureau of Non-Ferrous Metal Statistics.

United Kingdom Tin Statistics

(British Bureau of Non-Ferrous Metal Statistics)

	Tin Content of Tin in Ore: Imports	Production*	Stock at end of period*	Tin Metal: Imports	Production*	Consumption	Exports & Re-exports	Stock at end of period
1956 Total	26,571	1,044	2,393	2,226	26,424	22,232	8,371	3,175
1957								
September	4,291	70	4,070	527	2,260	1,836	431	6,308
October	2,177	98	3,303	784	2,899	1,947	528	6,045
November	5,275	78	2,837	4,012	3,881	1,615	481	10,591
December	4,187	83	3,872	3,125	3,403	1,420	236	15,815
Total	39,272	1,028	....	9,834	34,175	20,365	7,362	71,931
1958								
January	2,500	101	3,602	2,335	3,614	1,734	402	18,058
February	3,243	86	3,446	2,495	2,746	1,567	310	20,322
March	2,350	89	3,261	1,018	3,106	1,566	1,408	20,940
April	2,678	82	4,407	582	1,790	1,725	924	20,069
May	2,707	101	3,872	1,428	3,400	1,583	....	21,529
June	1,315	104	2,431	1,029	2,964	1,719	912	21,715
July	2,007	107	2,020	329	2,904	1,656	478	20,880
August	2,235	44	2,063	1,525	2,423	1,412	912	19,676
September	1,743	99	1,564	1,141	2,579	1,784	988	19,942
October	1,913	....	1,419	145	2,488	2,072	882	20,135

*As reported by International Tin Study Group. Production of Tin Metal includes production from imported scrap and residues refined on toll. Stocks exclude strategic stock but include official warehouse stocks.

Canada's Copper Output

(Dominion Bureau of Statistics)

(Refined Copper)
(In Tons)

	1955	1956	1957	1958
Jan.	22,600	26,653	25,469	32,868
Feb.	21,455	26,229	21,861	28,668
Mar.	25,083	26,750	27,663	29,239
Apr.	24,077	26,617	27,398	30,635
May	23,840	27,626	29,086	32,471
June	21,890	27,122	24,093	32,418
July	21,185	27,250	27,195	31,131
Aug.	26,184	29,219	26,943	30,867
Sept.	24,752	27,950	24,633	27,546
Oct.	25,546	29,696	30,312	22,560
Nov.	25,213	27,346	27,331	....
Dec.	27,172	28,716	31,604	....
Year	288,987	331,174	323,588	....

Canada's Lead Exports

(Dominion Bureau of Statistics)

(In Pigs)
(In Tons)

	1955	1956	1957	1958
Jan.	5,500	4,888	8,946	4,752
Feb.	11,882	3,856	6,633	1,553
Mar.	10,318	4,007	7,044	9,497
Apr.	11,967	7,636	7,314	7,450
May	6,416	7,214	9,676	7,764
June	9,897	6,632	7,210	4,036
July	8,341	9,696	4,682	12,629
Aug.	4,884	4,713	6,416	7,232
Sept.	5,538	9,908	8,467	5,125
Oct.	8,053	9,072	7,761	10,320
Nov.	4,622	9,227	6,175	....
Dec.	5,286	2,734	4,217	....
Year	92,407	79,633	84,541	....

Canada's Silver Exports

(Dominion Bureau of Statistics)

(In ores and concentrates)
(Fine Ounces)

	1956	1957	1958
Jan.	435,047	253,940	634,715
Feb.	196,803	380,463	208,149
Mar.	328,857	521,849	350,827
Apr.	348,838	431,646	284,971
May	447,710	523,228	376,082
June	495,742	468,559	438,253
July	686,209	844,545	529,770
Aug.	1,080,301	811,530	279,511
Sept.	481,042	861,857	583,570
Oct.	731,099	432,000	323,475
Nov.	669,285	263,273	.....
Dec.	1,023,481	186,569	.....
Year	6,924,414	5,979,459	.....

Canada's Copper Exports

(Dominion Bureau of Statistics)

(Ingots, bars, slabs and billets)
(In Tons)

	1955	1956	1957	1958
Jan.	11,078	15,981	20,582	26,883
Feb.	12,897	11,041	16,272	16,816
Mar.	12,423	12,276	14,720	18,662
Apr.	10,321	14,476	16,417	23,261
May	10,911	12,851	19,048	19,358
June	13,387	10,985	10,826	20,831
July	12,674	13,599	18,621	21,703
Aug.	13,219	14,710	21,980	15,881
Sept.	13,479	17,268	14,314	15,373
Oct.	14,208	13,896	13,110	20,341
Nov.	14,545	19,130	16,622	....
Dec.	14,057	18,630	16,282	....
Year	153,199	174,843	198,794	....

Canada's Zinc Output

(Dominion Bureau of Statistics)

(Refined Zinc)
(In Tons)

	1955	1956	1957	1958
Jan.	22,028	21,696	20,340	21,801
Feb.	19,865	20,356	19,808	19,743
Mar.	22,215	22,010	21,941	22,314
Apr.	21,301	21,339	20,504	20,989
May	21,599	21,790	20,564	21,269
June	20,565	20,780	19,928	20,353
July	21,769	21,691	20,061	20,873
Aug.	22,029	21,354	20,305	21,152
Sept.	20,898	20,691	20,247	20,530
Oct.	22,206	21,412	20,892	21,125
Nov.	21,398	20,470	20,933	....
Dec.	21,135	22,012	21,828	....
Year	257,008	255,601	247,351	....

Canada's Silver Output

(Dominion Bureau of Statistics)

(In Ounces)

	1956	1957	1958
Jan.	2,280,575	2,158,631	2,529,583
Feb.	2,094,467	2,051,679	2,294,655
Mar.	2,296,648	2,346,316	2,448,698
Apr.	1,759,384	2,225,638	2,558,958
May	2,463,374	2,111,185	2,650,665
June	2,494,748	2,208,584	2,527,632
July	2,267,271	2,383,390	2,385,687
Aug.	2,315,312	2,592,468	2,884,154
Sept.	2,517,451	2,382,121	2,856,304
Oct.	2,379,162	2,817,358	2,390,012
Nov.	2,492,547	2,566,519	.....
Dec.	2,357,202	2,537,984	.....
Year	27,655,141	28,361,873	.....

Canada's Lead Output

(Dominion Bureau of Statistics)

(Recoverable Lead)*
(In Tons)

	1955	1956	1957	1958
Jan.	18,959	16,002	14,032	17,117
Feb.	15,018	14,344	15,170	14,908
Mar.	19,113	16,857	16,940	15,421
Apr.	17,889	11,573	14,275	15,644
May	16,808	15,446	14,591	15,131
June	17,800	18,145	16,431	15,645
July	16,650	15,841	14,377	14,076
Aug.	16,676	16,104	14,679	12,260
Sept.	15,972	15,760	15,869	15,401
Oct.	13,658	16,725	14,151	14,564
Nov.	15,182	14,865	15,879	....
Dec.	17,857	16,056	15,296	....
Year	201,583	188,971	181,690	....

* New base bullion from Canadian ores plus recoverable lead in ores or concentrates shipped for export.

Canada's Zinc Exports

(Dominion Bureau of Statistics)

(Slabs in Tons)

	1955	1956	1957	1958
Jan.	22,181	15,550	19,304	17,349
Feb.	25,556	11,757	16,618	8,376
Mar.	20,178	8,822	14,923	19,636
Apr.	21,018	14,317	17,131	16,346
May	14,820	11,357	16,680	15,122
June	19,581	15,296	16,157	7,776
July	13,522	15,499	12,912	27,394
Aug.	16,581	13,070	20,520	15,906
Sept.	11,793	19,732	17,671	8,670
Oct.	19,836	20,792	16,735	22,310
Nov.	14,164	21,411	17,225	....
Dec.	14,607	16,125	16,131	....
Year	213,837	183,728	202,007	....

Canada's Nickel Output

(Dominion Bureau of Statistics)

(In Tons)

	1955	1956	1957	1958
Jan.	14,387	14,985	16,609	16,710
Feb.	13,375	14,997	15,027	15,896
Mar.	15,544	15,504	16,733	15,853
Apr.	15,011	14,431	15,347	15,163
May	15,352	15,203	16,225	15,231
June	14,835	14,492	15,447	14,603
July	14,530	15,125	15,878	12,851
Aug.	14,825	14,852	16,756	13,097
Sept.	13,734	14,530	15,604	11,786
Oct.	14,411	15,762	15,628	3,649
Nov.	14,290	15,062	14,587	....
Dec.	14,881	14,824	15,096	....
Year	175,173	178,767	188,962	....

Canadian Copper Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

	1958		
	Sept.	Oct.	Nov.
Ore, matte, regulus, etc. (content)	2,210	3,821	1,051
United States	980	97	437
Belgium	136	...	...
Germany (W.)	72	33	...
Norway	962	1,348	614
U. Kingdom	60	135	...
Japan	...	2,208	...
Ingots, bars, billets, anodes	15,373	20,340	14,391
United States	3,834	4,977	4,287
Brazil	55	133	...
Belgium	336	...	280
Czechoslovakia	112	...	...
Denmark	56	...	...
France	1,120	2,144	840
Germany (W.)	1,092	1,091	392
Italy	504	543	140
Netherlands	308	28	252
Sweden	449	56	...
Switzerland	56	84	308
U. Kingdom	6,988	9,982	5,934
India	330	1,214	1,901
Japan	110	...	...
Other countries	23	88	57
Total Exports:			
Crude & refined	17,583	24,161	15,442
Old and scrap	836	466	997
Rods, strips, sheet & tubing	1,003	1,647	1,328

Canadian Zinc Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

	1958		
	Sept.	Oct.	Nov.
Ore (zinc content)	24,269	10,738	11,982
United States	12,455	10,738	11,982
Belgium	7,482	...	...
France	1,793	...	...
Germany (W.)	1,693	...	...
Netherlands	846	...	...
Slab zinc	8,670	22,810	17,978
United States	4,134	14,425	5,114
Brazil	...	554	540
Chile	...	22	66
Denmark	56	...	...
Germany (W.)	224	812	140
Netherlands	...	224	112
United Kingdom	4,256	6,548	10,507
Korea	...	142	...
Taiwan	...	33	134
India	...	...	560
Pakistan	...	29	784
Other countries	...	21	21
Total Exports:			
Ore and slabs	32,939	33,548	29,960
Zinc scrap, dross, ashes	715	509	773
United States	51	73	8
Belgium	89	295	530
Netherlands	...	...	228
Japan	35	141	7

Canada's Nickel Exports

(Dominion Bureau of Statistics)
(Refined, in oxides, matte, etc.)
(In Tons)

	1956	1957	1958
January	15,121	14,260	14,233
February	13,669	9,974	12,157
March	16,219	14,958	12,316
April	14,448	18,671	20,962
May	14,729	18,351	20,574
June	16,403	14,539	16,144
July	11,079	14,181	14,055
August	18,470	14,966	13,012
September	13,849	14,160	14,371
October	12,800	13,370	8,312
November	14,084	16,620	...
December	15,684	14,606	...
Year	176,836	178,656	

Canadian Lead Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

	1958		
	Sept.	Oct.	Nov.
Ore (lead content)	6,476	4,092	1,509
United States	1,475	3,266	1,509
Belgium	3,265	...	...
Germany (W.)	1,736	826	...
Refined lead	5,125	10,320	10,641
United States	3,388	6,429	1,101
Brazil	...	82	...
U. Kingdom	1,736	3,724	9,140
Japan	...	33	...
Taiwan	...	51	146
Other countries	1	1	254
Total Exports:			
Ore and refined	11,601	14,412	12,150
Pipe and tubing	...	...	1
Lead scrap	49	40	43

Copper Imports and Exports By Principal Countries

(A. B. M. S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.

	1958		
	Aug.	Sept.	Oct.
IMPORTS			
U. S. (blist., s.t.)	20,388	22,830	...
(ore, etc., s.t.)	3,908	4,477	...
(ref., s.t.)	3,443	5,120	...
Denmark	357	517	607
France (crude)	813	...	813
(refined)	16,931	18,068	16,168
Italy	6,309	...	...
Netherlands	2,244	3,552	2,901
Norway	562	249	...
Sweden	4,623	4,430	...
Switzerland	3,165	2,577	2,090
U. K. (l.t.)	42,164	43,376	41,289
India (blister/-ref., l.t.)*	4,573	4,743	3,642
EXPORTS			
U. S. (ore and unref., st.)	973	412	...
(refined, s.t.)	40,551	32,238	...
Canada (refined, s.t.)	15,881	15,373	20,340
Finland‡	380	517	...
Norway	2,059	1,482	...
Sweden	1,364	1,067	...
U. K. (l.t.)	6,156	4,980	6,468
Turkey†	1,000	...	...
No. Rhodesia (ref. & blist., l.t.)*	35,367	28,514	17,909

† Includes alloys.
‡ Includes old.
* British Bureau of Non-Ferrous Metal Statistics.

French Copper Imports

(A.B.M.S.)

(In metric tons)

	1958		
	Sept.	Oct.	Nov.
Crude copper for refining (blister, black and cement)	...	813	...
Belgian Congo	...	813	...
Refined	18,068	16,168	18,556
United States	6,317	6,750	7,822
Canada	538	2,199	782
Chile	...	10	17
Belgium	5,356	4,237	3,539
Germany (W.)	140	386	107
Norway	...	203	...
Sweden	304	155	22
U. Kingdom	136	66	89
Belgian Congo	3,101	1,848	2,994
Rhodesia-Nyasaland	2,176	314	3,184

French Zinc Imports

(A.B.M.S.)

(In metric tons)

	1958		
	Sept.	Oct.	Nov.
Ore (gross weight)	20,437	49,407	44,127
Canada	...	3,000	...
Bolivia	...	...	4,041
Peru	2,315	...	1,444
Finland	...	...	4,000
Greece	1,341	...	...
Italy	2,045	4,807	5,977
Norway	381	353	...
Spain	856	8,736	3,007
Yugoslavia	...	9,092	1,600
Algeria	4,304	13,493	8,670
Morocco	7,527	8,761	11,948
Tunisia	...	1,165	...
Belgian Congo	1,668	...	2,190
Australia	...	...	1,250
Slabs, bars, blocks, etc.	1,533	2,181	985
Mexico	...	150	...
Belgium	1,181	1,550	882
Germany (W.)	...	390	15
Italy	142	81	76
Norway	199	...	...
Algeria	11	10	12

French Metal Exports

(A.B.M.S.)

(In metric tons)

	1958		
	Sept.	Oct.	Nov.
LEAD			
Ore (gross weight)	7	347	12
Pig lead	1,474	828	2,207
United States	...	...	250
Denmark	...	...	203
Germany (W.)	325	525	465
Switzerland	285	300	775
United Kingdom	813	...	406
Other countries	51	3	108
Antimonial lead	130	304	380
COPPER			
Crude copper for refining (blister, black and cement)	4	2	...
ZINC			
Slabs, bars, blocks, etc.	...	5	82

U. K. Copper Imports

(British Bureau of Non-Ferous Metal Statistics)

(In tons of 2,240 lbs.)

	1958		
	Sept.	Oct.	Nov.
(Gross Weight)			
Copper and copper alloys	43,376	41,289	32,958
U. of S. Africa	...	2	250
Rhodesia-Nyasaland	18,833	19,571	8,692
Canada	8,823	6,740	4,448
Belgium	1	5	204
Germany (W.)	37	24	20
Norway	101	158	50
Sweden	2	...	...
United States	11,841	9,218	11,082
Chile	3,150	5,150	7,900
Peru	150	150	...
Belgian Congo	250	250	250
Other countries	188	21	62
Of which:			
Electrolytic	33,936	26,762	19,771
Other refined	2,850	4,350	4,274
Blister or rough	6,398	9,769	8,645
Wrought and alloys	192	408	268
Total	43,376	41,289	32,958

Nonferrous Castings

MONTHLY SHIPMENTS, BY TYPE OF METAL

(Bureau of Census — Thousands of Pounds)

	Aluminum	Copper	Magnesium	Zinc	Lead Die
1953 Total	658,022	990,496	34,517	521,253	20,444
1954 Total	607,764	834,557	25,572	474,741	18,396
1955 Total	833,058	1,011,748	27,892	781,254	21,045
1956 Total	801,136	966,473	36,168	88,069	20,734
1957					
May	65,108	75,347	2,832	53,565	2,373
June	58,547	70,959	2,973	49,356	2,336
July	52,173	60,621	2,544	48,379	2,079
Aug.	55,735	71,233	2,315	49,829	2,165
Sept.	58,692	70,804	2,279	47,736	2,115
Oct.	64,140	81,836	2,192	62,332	2,481
Nov.	58,898	70,187	1,920	58,689	1,590
Dec.	53,102	65,708	1,533	49,597	1,399
Total	751,856	875,389	30,322	663,330	23,791
1958					
January	57,845	69,707	1,881	50,658	1,566
February	50,695	58,356	1,803	42,687	1,294
March	50,547	60,157	1,975	39,719	1,630
April	44,948	59,311	2,215	35,796	1,467
May	44,093	57,506	2,422	36,447	1,655
June	40,701	57,124	2,205	38,132	1,971
July	38,818	51,124	2,200	32,765	1,394
August	45,034	57,790	1,869	35,860	1,804
September	52,796	64,447	2,804	47,127	1,725
October	55,699	74,012	2,627	45,045	1,708

Copper Castings Shipments

BY TYPE OF CASTING

(Bureau of Census) (Thousands of Pounds)

	Total	Sand	Permanent Mold	Die	All Other
1951 Total	1,197,443	1,075,437	69,883	12,516	39,607
1952 Total	1,009,910	910,862	63,865	8,259	26,924
1953 Total	990,496	888,369	61,316	10,077	30,734
1954 Total	834,557	751,804	48,849	6,480	27,394
1955 Total	1,011,748	907,852	63,041	8,541	31,408
1956 Total	966,113	866,404	57,522	10,023	32,134
1957					
May	75,347	67,251	4,421	953	2,722
June	70,959	63,910	3,590	868	2,591
July	60,621	54,847	3,010	825	1,939
Aug.	71,233	64,953	3,278	799	2,203
Sept.	70,804	64,470	3,243	870	2,221
Oct.	81,836	74,391	3,693	1,057	2,695
Nov.	70,187	63,944	3,006	862	2,375
Dec.	65,708	59,606	3,046	888	2,168
Total	875,389	789,819	44,746	10,776	30,048
1958					
January	69,707	63,294	3,327	894	2,192
February	58,356	52,579	3,202	796	1,779
March	60,157	54,007	3,395	823	1,932
April	59,311	53,271	3,385	949	1,705
May	57,506	51,634	3,077	891	1,904
June	57,124	51,967	3,001	839	1,317
July	51,124	46,636	2,351	792	1,345
August	57,590	52,981	2,425	682	1,702
September	64,447	58,435	2,888	876	2,248
October	74,012	61,564	3,239	790	2,419

Nickel Averages

Electro, cathode sheets, 99.00%, f.o.b. refinery, duty included

(Cents per pound)

	1955	1956	1957	1958
Jan.	64.50	64.50	74.00	74.00
Feb.	64.50	64.50	74.00	74.00
Mar.	64.50	64.50	74.00	74.00
Apr.	64.50	64.50	74.00	74.00
May	64.50	64.50	74.00	74.00
June	64.50	64.50	74.00	74.00
July	64.50	64.50	74.00	74.00
Aug.	64.50	64.50	74.00	74.00
Sept.	64.50	64.50	74.00	74.00
Oct.	64.50	64.50	74.00	74.00
Nov.	64.50	64.50	74.00	74.00
Dec.	64.50	72.48	74.00	74.00
Aver.	**64.50**	**65.165**	**74.00**	**74.00**

Platinum Averages

N. Y. MONTHLY QUOTATIONS

(Dollars per Troy Ounce)

	1955	1956	1957	1958
Jan.	81.00	106.30	101.92	77.85
Feb.	78.16	104.34	98.59	74.82
Mar.	78.00	104.23	93.50	72.096
Apr.	77.94	103.92	93.45	70.72
May	77.50	105.23	92.865	67.34
June	78.33	106.50	92.02	66.18
July	81.78	106.50	90.265	64.35
Aug.	84.59	105.76	84.426	60.94
Sept.	91.96	105.50	84.00	59.60
Oct.	94.60	104.85	84.00	57.327
Nov.	103.11	104.50	83.80	56.41
Dec.	106.58	104.50	78.70	53.154
Aver.	**86.12**	**105.18**	**89.79**	**65.07**

Spot Straits Tin

(Straits, Open Market, N. Y.)

Monthly Average Prices

	1955	1956	1957	1958
Jan.	87.268	105.036	101.511	92.94
Feb.	90.836	100.803	101.132	93.915
Mar.	91.161	100.786	99.643	94.452
Apr.	91.48	99.268	99.304	92.988
May	91.41	96.994	98.347	94.512
June	93.68	94.589	98.05	94.708
July	97.08	96.143	96.52	94.892
Aug.	96.521	99.049	94.261	94.988
Sept.	96.607	103.809	93.406	94.101
Oct.	96.20	106.023	91.838	96.523
Nov.	97.987	110.921	89.236	99.118
Dec.	108.02	104.268	92.35	98.989
Aver.	**94.85**	**101.475**	**96.301**	**95.177**

Prompt Tin Prices

(Straits, Open Market, N. Y.)

Monthly Average Prices

(Cents per Pound)

	1955	1956	1957	1958
Jan.	87.628	104.768	101.347	92.653
Feb.	90.75	100.586	100.257	93.763
Mar.	91.065	100.524	99.476	94.363
Apr.	91.41	99.145	99.286	92.988
May	91.38	96.853	98.335	94.512
June	93.64	94.488	98.025	94.619
July	96.825	96.131	96.44	94.892
Aug.	96.456	98.924	94.159	94.976
Sept.	96.256	103.559	93.313	94.054
Oct.	96.075	105.716	91.848	96.455
Nov.	97.882	110.329	89.236	98.985
Dec.	107.75	104.00	92.34	98.96
Aver.	**94.73**	**101.252**	**93.672**	**95.069**

Quicksilver Averages

N. Y. Monthly Averages

Virgin, Dollars per 76-lb. Flask

	1955	1956	1957	1958
Jan.	324.68	277.88	256.00	224.35
Feb.	324.68	270.29	256.00	229.39
Mar.	322.61	261.40	256.00	232.096
Apr.	318.14	267.22	256.00	233.06
May	306.62	267.675	256.00	229.48
June	286.98	260.69	256.00	229.00
July	268.22	256.06	256.00	230.25
Aug.	255.18	256.00	252.20	240.27
Sept.	263.70	256.00	248.58	241.12
Oct.	279.02	255.92	234.48	235.94
Nov.	282.50	255.13	228.33	230.05
Dec.	282.27	256.00	226.50	223.54
Aver.	**292.90**	**261.71**	**248.51**	**230.96**

Primary Aluminum Output, Shipments and Stocks

(U. S. Department of Interior)

	Stocks beginning of month short tons	Production short tons	—Sold or Used— Short tons	Value f. o. b. plant	Stocks end of month short tons
1957					
August	179,366	143,449	129,839	65,509,199	192,976
September	192,976	129,278	147,169	75,823,527	175,085
October	175,085	133,759	125,430	67,292,495	183,414
November	183,414	135,024	146,333	78,858,676	172,105
December	172,105	140,036	140,996	70,850,564	171,145
Total	....	1,647,714	1,579,035	.....	.....
1958					
January	171,142	139,910	134,983	$69,837,103	176,069
February	176,069	121,980	118,608	61,426,895	179,441
March	179,441	134,019	123,461	63,341,320	189,999
April	189,999	124,999	127,608	63,222,858	187,390
May	187,390	126,357	130,160	62,816,641	183,557
June	183,557	115,326	130,787	63,091,679	168,096
July	168,096	118,541	134,083	64,726,335	152,554
August	152,554	125,416	132,765	64,611,494	145,205
September	145,205	124,714	146,870	71,641,275	125,049

Aluminum Wrought Products

PRODUCERS' MONTHLY NET SHIPMENTS

(Bureau of Census — Thousands of Pounds)

	Total	Plate, Sheet, & Strip	Rolled Structural Shapes, Rod, Bar & Wire	Extruded Shapes Tube Blooms & Tubing	Powder, Flake, & Paste
1954 Total	2,088,439	1,165,090	357,229	518,070	46,255
1955 Total	2,805,500	1,542,368	365,391	812,311	35,854
1956 Total	2,870,101	1,577,601	398,602	782,398	28,017
1957					
April	238,212	126,755	34,805	68,284	2,572
May	249,012	130,047	35,680	74,364	2,670
June	227,388	117,103	32,847	69,411	2,630
July	249,047	130,624	39,342	71,339	3,120
August	223,786	117,796	30,918	66,829	3,224
September	215,564	122,787	21,735	63,421	2,802
October	230,913	121,654	23,075	69,554	2,104
November	186,974	114,618	31,501	64,197	1,716
December	177,520	96,078	21,363	54,672	1,480
Total	2,677,423	1,396,502	399,040	789,430	28,187
1958					
January	193,678	108,616	21,915	57,188	1,538
February	207,459	118,835	21,983	58,296	1,927
March	190,092	108,913	20,692	55,973	1,533
April	210,477	118,793	22,178	62,737	1,954
May	217,299	115,660	27,361	67,376	2,389
June	228,587	118,767	28,674	74,580	2,248
July	229,654	126,160	24,678	72,194	2,642
August	213,548	115,376	23,581	67,953	3,154
September	231,168	125,937	23,287	75,269	2,665
October	254,023	128,967	24,442	85,038	2,163

Aluminum Castings Shipments

(Bureau of Census)

BY TYPE OF CASTING

(Thousands of Pounds)

	Total	Sand	Permanent Mold	Die	All Other
1954 Total	609,066	155,738	213,968	232,726	6,800
1955 Total	833,058	171,757	298,115	354,804	8,282
1956 Total	801,036	171,763	245,421	376,108	7,736
1957					
June	58,547	11,585	17,180	29,700	...
July	52,173	10,447	16,322	25,339	...
August	55,735	10,966	18,398	26,319	...
September	58,692	11,367	17,820	24,900	...
October	64,140	11,570	20,543	31,936	...
November	58,898	10,411	18,611	29,793	...
December	53,102	9,302	16,724	26,978	...
1957 Total	751,656	144,121	232,326	369,086	...
1958					
January	57,845	10,724	18,082	28,937	...
February	50,695	9,601	15,456	25,579	...
March	50,547	9,311	15,255	25,918	...
April	44,948	9,531	13,369	21,956	...
May	44,093	9,312	13,648	21,091	...
June	40,701	8,644	13,679	18,292	...
July	38,818	8,658	12,342	17,714	...
August	45,034	9,034	14,426	21,505	...
September	52,796	10,261	16,241	26,254	...
October	55,699	10,932	17,189	27,511	...

Virgin Aluminum

Ingot (30 lb.) 99½% Plus, Delivered

Monthly Average Prices

(Cents per pound)

	1955	1957	1957	1958
Jan.	22.90	24.40	27.10	28.10
Feb.	23.20	24.40	27.10	28.10
Mar.	23.20	24.60	27.10	28.10
Apr.	23.20	25.90	27.10	26.10
May	23.20	25.90	27.10	26.10
June	23.20	25.90	27.10	26.10
July	23.20	25.90	27.10	26.10
Aug.	24.26	26.70	28.10	26.77
Sept.	24.40	27.10	28.10	26.80
Oct.	24.20	27.10	28.10	26.80
Nov.	24.40	27.10	28.10	26.80
Dec.	24.40	27.10	28.10	26.80
Aver.	23.655	26.008	27.517	26.889

Magnesium Wrought Products Shipments

(Bureau of Census)

(Thousands of Pounds)

	1955	1956	1957	1958
Jan.	1,776	2,188	2,130	1,271
Feb.	1,648	1,901	2,522	2,522
Mar.	1,947	1,946	2,388	1,398
Apr.	1,756	2,279	2,511	1,479
May	1,836	2,462	2,230	1,443
June	1,686	2,302	1,881	1,709
July	1,437	2,002	1,428	1,227
Aug.	1,742	2,523	1,540	1,823
Sept.	2,159	2,031	1,501	1,807
Oct.	1,667	861	1,453	....
Nov.	1,954	2,141	1,230	....
Dec.	1,577	2,452	1,102	....
Total	21,186	24,975	21,915	....

Cadmium Averages

N. Y. Monthly Averages

Cents per lb. in ton lots

	1955	1956	1957	1958
Jan.	170.00	170.00	170.00	155.00
Feb.	170.00	170.00	170.00	155.00
Mar.	170.00	170.00	170.00	155.00
Apr.	170.00	170.00	170.00	155.00
May	170.00	170.00	170.00	155.00
June	170.00	170.00	170.00	155.00
July	170.00	170.00	170.00	155.00
Aug.	170.00	170.00	170.00	155.00
Sept.	170.00	170.00	170.00	152.60
Oct.	170.00	170.00	170.00	145.00
Nov.	170.00	170.00	170.00	145.00
Dec.	170.00	170.00	166.40	145.00
Aver.	170.00	170.00	169.70	152.30

Steel Ingot Production

(American Iron and Steel Institute)

Period	Estimated Production — All Companies: OPEN HEARTH Net tons	% of capacity	BESSEMER Net tons	% of capacity	ELECTRIC Net tons	% of capacity	TOTAL Net tons	% of capacity	Calculated weekly production, all companies (net tons)
1954 Total ..	80,327,494	73.6	2,548,104	53.2	5,436,054	52.0	88,311,652	71.0	1,693,741
1956 Total ..	102,840,585	91.6	3,227,997	67.4	9,147,567	81.2	115,216,149	89.8	2,203,828
1957									
June	8,498,903	88.4	210,915	57.0	681,584	68.9	9,391,402	85.6	2,189,138
July	8,086,519	81.4	194,638	50.9	627,575	61.4	8,908,732	78.6	2,015,550
August	8,297,172	83.6	204,723	53.5	731,995	71.6	9,233,890	81.5	2,084,400
September ..	8,135,139	84.7	185,967	50.2	656,900	66.4	8,979,906	81.8	2,097,642
October	8,348,522	84.1	154,577	40.5	694,618	67.6	9,197,717	81.1	2,076,234
November ..	7,674,698	79.9	134,709	36.4	583,512	59.0	8,392,919	76.5	1,956,391
December ..	6,783,262	68.3	108,337	28.3	528,686	51.7	7,420,285	65.5	1,678,798
Total	101,657,776	87.0	2,475,138	54.9	8,582,082	71.3	112,714,996	84.5	2,161,776
1958									
January	6,085,124	58.6	121,338	35.5	547,450	44.8	6,753,912	56.1	1,524,585
February ...	5,252,112	56.0	81,597	26.4	448,614	40.6	5,782,373	53.6	1,445,581
March	5,598,944	53.9	122,317	35.7	533,361	43.6	6,254,622	52.3	1,412,000
April	4,875,619	48.5	109,433	33.1	547,939	46.3	5,532,991	47.8	1,289,741
May	5,602,123	53.7	110,366	32.3	588,670	48.2	6,301,159	52.7	1,422,384
June	6,378,942	63.4	88,125	26.6	660,413	55.8	7,127,480	61.6	1,661,417
July	5,712,587	55.0	114,218	33.4	593,600	48.6	6,420,405	53.7	1,452,580
August	6,481,815	62.4	134,135	39.3	670,383	54.8	7,286,003	61	1,644,696
September ..	6,769,660	67.3	103,194	31.2	737,518	62.3	7,610,372	65.8	1,778,124
October	7,795,541	75.0	148,458	43.4	873,779	71.5	8,817,278	73.8	1,990,469
November ...	7,672,555	75.3	145,867	44.1	850,896	71.9	8,569,318	74.1	1,997,510
December ...	7,764,000	74.7	117,000	34.2	832,000	68.1	8,793,000	72.9	1,971,000
Total	75,888,392	62.0	1,396,348	34.7	7,972,623	55.4	85,257,363	69.6	1,635,162

Blast Furnace Output

(American Iron and Steel Institute)

	net tons: Pig Iron	Ferro-manganese & Spiegel	Total	% Capacity
1950				
Tl. Yr.	64,810,272	673,896	65,484,168	91.5
1951				
Tl. Yr.	70,487,380	746,381	71,232,761	98.8
1952				
Tl. Yr.	61,528,665	629,926	62,158,591	84.2
1953				
Total	74,987,721	855,038	75,842,759	95.5
1954				
Total	58,119,382	568,735	58,688,117	71.6
1955				
Total	77,114,073	868,758	77,800,831	92.7
1956				
Apr. ...	6,860,883	63,760	6,924,643	98.4
May ...	6,878,102	47,840	6,920,942	95.3
June ...	6,387,608	46,981	6,434,589	91.6
July ...	1,089,518	17,491	1,107,009	15.2
Aug. ...	5,100,669	41,548	5,142,217	70.8
Sept. ...	6,873,064	59,584	6,932,648	98.7
Oct. ..	7,243,630	69,909	7,315,559	100.8
Nov. ..	6,977,457	58,614	7,036,091	100.1
Dec. ..	7,268,743	65,841	7,334,584	101.0
Total ..	75,301,134	664,341	75,965,475	88.9
1957				
Jan.	7,209,547	72,826	7,282,373	98.8
Feb.	6,596,133	61,973	6,658,106	100.0
Mar. ..	7,179,160	67,779	7,246,879	98.3
Apr. ..	6,810,102	60,784	6,870,886	96.3
May ..	6,879,881	65,566	6,945,447	94.2
June ..	6,593,326	66,266	6,659,592	93.3
July ..	6,625,901	66,031	6,691,932	90.8
Aug. ..	6,719,763	61,988	6,781,751	92.0
Sept. ..	6,569,074	58,837	6,627,911	92.9
Oct. ..	6,454,450	65,028	6,519,478	88.4
Nov. ..	5,711,242	68,637	5,779,879	81.0
Dec. ..	5,212,624	69,175	4,854,444	62.8
Total ..	78,557,011	782,660	79,339,671	91.4
1958				
Jan.	4,785,269	69,175	4,854,444	62.8
Feb.	4,016,276	47,953	4,064,229	58.2
Mar.	4,418,778	45,175	4,463,953	57.8
April ..	3,787,907	39,302	3,827,209	51.2
May ...	4,048,328	25,468	4,073,796	52.7
June ...	4,396,285	26,463	4,422,748	59.1
July ...	4,277,515	26,668	4,304,183	55.7
Aug. ...	4,799,965	31,374	4,831,329	62.1
Sept.	5,041,042	31,348	5,072,390	67.8
Oct.	5,835,995	36,963	5,872,958	76.0
Nov.	5,907,888	39,275	5,946,163	79.5
Dec.	6,025,385	47,505	6,072,890	78.6
Total ..	57,298,644	465,456	37,298,644	63.5

Steel Castings Shipments

(Bureau of Census)

	(Short Tons) Total	For Sale	For Own Use
1951	...2,101,604	1,507,413	594,191
1952	...1,925,116	1,476,352	448,767
1953	...1,829,277	1,290,016	431,330
1954			
Total	..1,184,096	880,158	303,938
1955			
Total	..1,530,694	1,166,706	363,988
1956			
July ...	117,984	96,350	21,634
Aug. ...	159,831	127,001	32,830
Sept. ..	155,046	121,705	33,341
Oct.	175,630	135,798	39,832
Nov. ...	164,114	126,900	37,214
Dec. ...	158,725	125,569	33,156
Total ..	1,931,987	1,512,290	416,697
1957			
Jan. ...	169,240	133,826	35,414
Feb. ...	154,932	121,667	33,265
Mar. ...	160,054	124,416	35,638
Apr. ...	162,498	124,549	37,949
May ...	164,575	125,431	39,144
June ...	153,647	119,353	34,294
July ...	122,018	90,037	31,981
Aug. ...	145,926	111,080	34,846
Sept. ..	139,002	105,611	33,391
Oct. ...	146,397	113,216	33,181
Nov. ...	127,115	98,436	28,679
Dec. ...	120,787	92,125	28,662
Total ..	1,766,191	1,261,301	406,444
1958			
Jan. ...	120,722	94,717	26,005
Feb. ...	103,297	79,708	23,589
Mar. ...	106,233	82,195	24,038
Apr. ...	91,464	69,121	22,343
May	87,002	66,086	20,916
June ...	92,681	71,624	21,237
July ...	68,802	48,618	10,184
Aug. ...	80,886	59,816	21,070
Sept. ...	85,277	64,586	20,691
Oct. ...	95,389	73,367	22,022

Galvanized Sheet Shipments

(American Iron & Steel Institute)

(Net Tons)

	1955	1956	1957	1958
Jan.	211,101	269,464	235,902	186,649
Feb.	199,408	272,997	205,048	167,627
Mar.	238,649	291,193	206,836	195,885
Apr.	239,001	266,728	198,585	206,368
May	235,962	272,741	206,657	231,318
June	246,940	279,058	239,037	277,180
July	205,211	*	167,247	239,883
Aug.	241,863	276,048	186,790	253,263
Sept.	269,020	256,803	183,952	258,723
Oct.	260,010	278,637	212,886	290,157
Nov.	255,692	255,135	190,380	253,909
Dec.	261,640	239,173	159,363	.....
Tot.	2,864,497	2,957,991	2,392,637	.....

* Combined with August figures.

SHIPMENTS OF TIN-TERNEPLATE

(American Iron & Steel Institute)

(Net Tons)

	Hot Dipped 1957	Hot Dipped 1958	Electrolytic 1957	Electrolytic 1958
Jan.	88,174	31,455	492,502	474,359
Feb.	63,040	29,451	407,008	397,861
Mar.	113,593	36,794	618,827	419,102
Apr.	130,037	43,670	664,590	468,568
May	34,282	37,628	278,769	402,521
June	32,783	42,850	321,584	429,761
July	39,234	45,481	380,815	422,776
Aug.	40,542	46,037	409,515	464,439
Sept.	36,983	43,217	338,078	525,739
Oct	28,917	60,261	293,668	763,361
Nov.	20,645	14,596	256,911	113,134
Dec.	21,633	.....	214,215	.....
Tot.	649,974		4,676,482	

Steel Ingot Operations

(Percentage of Capacity as Reported by American Iron & Steel Institute)

Week Beginning	1955	1956	1957	1958
Jan. 6...	81.2	97.6	98.4	56.1
Jan. 13...	83.2	98.6	96.4	57.0
Jan. 20...	83.2	99.0	96.6	55.5
Jan. 27...	85.0	100.4	97.6	54.0
Feb. 4...	85.4	99.3	97.1	54.0
Feb. 11...	86.8	99.1	97.7	53.5
Feb. 18...	89.1	98.8	97.8	50.9
Feb. 25...	90.8	98.8	96.0	54.6
Mar. 4...	85.4	99.3	97.1	53.1
Mar. 11...	92.9	100.0	93.8	52.4
Mar. 18...	94.2	100.6	93.5	52.5
Mar. 25...	93.7	99.5	92.4	50.6
Apr. 1...	94.4	99.6	90.6	48.6
Apr. 8...	95.3	97.7	90.3	48.5
Apr. 15...	94.6	100.9	90.4	46.8
Apr. 22...	94.6	100.2	88.7	47.9
Apr. 29...	95.6	100.5	87.0	47.8
May 6...	96.6	96.4	86.7	49.4
May 13...	97.2	95.2	84.2	52.3
May 20...	96.9	95.3	86.4	56.4
May 27...	96.4	97.3	88.0	58.1
June 3...	95.8	96.3	87.5	62.4
June 10...	94.7	96.7	86.5	64.0
June 17...	96.0	93.4	85.2	64.9
June 24...	95.0	93.0	84.0	61.7
July 1...	71.1	84.9	78.5	51.0
July 8...	85.9	12.3	78.7	53.4
July 15...	91.2	12.9	79.3	54.9
July 22...	91.0	14.6	79.4	57.3
July 29...	90.7	17.0	79.4	57.8
Aug. 5...	86.9	16.9	79.8	58.8
Aug. 12...	89.4	57.5	80.6	60.5
Aug. 19...	90.2	87.5	82.1	62.6
Aug. 26...	90.6	95.8	82.2	63.5
Sept. 2...	93.4	97.0	81.0	61.7
Sept. 9...	93.8	98.7	81.9	65.9
Sept. 16...	95.7	100.6	82.1	65.6
Sept. 23...	96.1	100.6	82.2	67.3
Sept. 30...	97.0	101.6	82.6	70.4
Oct. 7...	96.7	101.8	82.2	71.6
Oct. 14...	96.5	100.9	80.9	74.2
Oct. 21...	98.9	101.4	80.2	74.8
Oct. 28...100.0		101.2	79.7	75.0
Nov. 4...	99.4	101.3	78.0	74.5
Nov. 11...	99.6	100.6	77.7	74.5
Nov. 18...	99.2	100.2	76.0	74.1
Nov. 25...100.1		100.1	72.1	73.7
Dec. 2...	97.6	101.1	71.5	73.5
Dec. 9...100.1		101.3	69.2	73.5
Dec. 16...100.3		102.0	67.7	74.5
Dec. 23...	96.9	94.3	53.7	74.5
Dec. 30...	95.7	97.3	59.0	73.6

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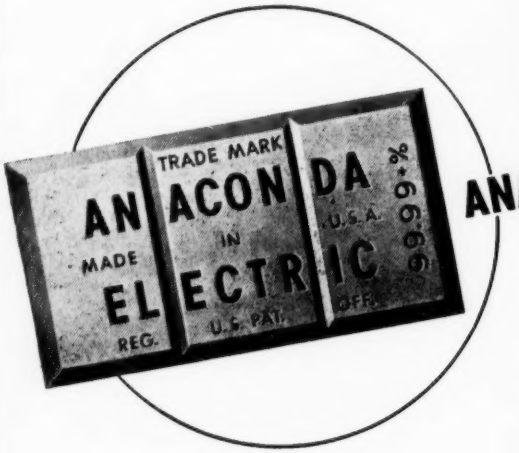

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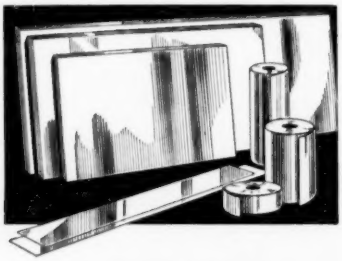

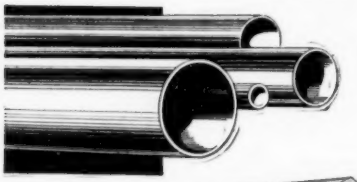

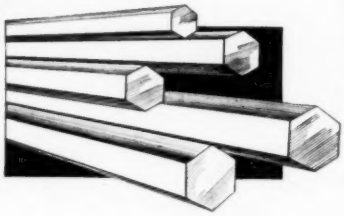

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